Clinical Lecture

ON

SOME CASES ILLUSTRATING THE OCCASIONALLY DECEPTIVE NATURE OF THE SYMPTOMS OF STRANGULATED HERNIA.

Delivered in St. George's Hospital Medical School,

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GENTLEMEN,—The subject of strangulated hernia is so fully dealt with in the various text-books of surgery that it will, I have no doubt, appear at first sight very unlikely that I can bring before you any facts relating to the subject which are sufficiently out of the common run to justify their use as a basis for a lecture of this kind. I hope, however, to be able to make it plain that cases of strangulated hernia do from time to time occur in which the symptoms deviate so much from the classic descriptions (with which I assume you are familiar) that they are worthy of careful study. Indeed, unless you have been prepared for the possible occurrence of such cases by having you attention rather prominently called to them, mistakes in diagnosis may easily befall you, to the great disadvantage of your patients and to the jeopardy of your own credit.

The occasional occurrence of the unorthodox in this respect has been especially called to my mind by three cases not long since under my care in the hospital, the progress of which some of you had ample opportunities for watching. In two of these the symptoms of intestinal obstruction were entirely wanting; and in the third, the most interesting of the series, every symptom of strangulation of a femoral hernia developed, and yet, upon operating, it was found that no rupture existed, nor had one ever been present.

CASE 1. *Strangulated omental hernia, in which there was no interference with the action of the bowels; herniotomy; commencing gangrene of contents of sac; radical cure; recovery.*—W. L——, a labourer thirty-two years of age, was admitted into the Belgrave ward on Oct. 22nd, 1890. He had been ruptured since he was fifteen years old; for five years after the original discovery of the hernia he had regularly worn a truss, but for ten years he had used no truss of any kind. The rupture had always been reducible till four days before his admission, when he suddenly felt some pain in the scrotum, found the rupture down, and could not put it back. The hernial swelling gradually increased in size, and the pain became more marked. There was neither vomiting nor nausea, and the bowels acted with daily regularity up to and including the morning of his admission. He came to the hospital on account of the pain, and for no other reason. He had walked straight from his work to seek relief, and great pressure was required to prevent his returning to it. On admission the patient complained of pain about the scrotum, with a feeling of dragging and weight around the umbilicus. There was a scrotal tumour the size of a small cocoanut, rather tense, a little tender, and irreducible. When I saw him, two hours after admission, almost all his pain had disappeared, and he begged to be allowed to leave the hospital at once. On examination I found the tumour of the size above mentioned, and in much the same condition. When the patient coughed the tumour moved freely under the hand, but the true hernial impulse was wanting. There was no constitutional disturbance, the temperature was only 99°, the pulse 76. Beyond the absence of the hernial impulse there was nothing distinctive of strangulation of the hernia. Herniotomy was at once performed. On opening the sac a quantity of fluid, at first clear and then blood-stained, escaped. The sac contained also a large mass of omentum congested throughout, at the back of which was a small area of commencing gangrene. There was a tight stricture at the internal ring, which required free division. The mass of omentum was ligatured and removed, with the exception of a pad of the healthiest part, which, after careful cleansing with a solution of 1 in 1000 of corrosive sublimate, was stitched across the ring in the manner described by me in THE LANCET of Sept. 12th, 1891. The sac was subsequently invaginated, and the pillar of the ring approximated by silk suture in the usual manner. The progress towards recovery was uninterrupted, and the patient left the hospital well on Nov. 26th.

CASE 2. *Painful tumour over the saphenous opening; diarrhœa; exploratory operation; strangulated hernia of vermiform appendix, which was gangrenous: removal of appendix; recovery.*—Sarah B——, aged fifty-three, was admitted into the Princess ward on Nov. 24th, 1890, suffering from what was supposed to be inflammation of some glands in Scarpa's triangle. She had always enjoyed good health until a year previously, when, in consequence of "a strain," a swelling came below the right groin. This swelling had ever since been troublesome and uncomfortable, becoming painful when she walked much; it was also tender, especially towards the end of the day. Four days before coming to the hospital she felt rather suddenly "out of sorts," and vomited. The swelling soon afterwards became painful and increased a little in size. Diarrhœa immediately followed, and continued up to the time of her admission. I saw the patient directly after she had been sent to bed. She was obviously very ill. The expression was anxious, the tongue whitish and rather dry, the temperature 102°, and the pulse quick. In the right groin, a little above the saphenous opening, was a hard swelling, rather irregular in shape, and presenting the exact appearance of a mass of inflamed glands. It was irreducible and tender; there was no impulse, and the skin was not infiltrated or unhealthy. On careful manipulation, there could be felt in the tumour a very faint crackling sensation. I therefore concluded that, in spite of the diarrhœa, the tumour was a hernia with gangrenous contents (probably omental), and possibly the condition known as Richter's hernia. The mass was therefore at once explored. After cutting through a quantity of inflammatory material, a small peritoneal sac was laid open, from which came a little fetid fluid. At the bottom of this sac lay a black worm-like body, which formed its entire contents, and proved to be the vermiform appendix, gangrenous and very tightly strangulated at the femoral ring. The parts having been thoroughly cleansed with a solution of corrosive sublimate (1 in 1000), the stricture was freely divided, the gangrenous part of the appendix being cut off and got out of the way. The incision made in dividing the stricture was then extended into the abdomen sufficiently to allow the cæcum to be drawn into the wound. The stump of the appendix was then removed through perfectly healthy tissues about half an inch from the cæcum. The peritoneal surfaces were inverted without difficulty, and retained in apposition by means of three Lembert's sutures. The parts, having been again thoroughly cleansed, were then returned into the abdomen, and the wound in the parietes brought together with silkworm gut sutures in the ordinary way. Rapid recovery followed. The diarrhœa ceased, and the temperature became normal within forty-eight hours of the operation. She was discharged well on Dec. 22nd.

It will be noticed that in one of these cases constipation and vomiting, two of the symptoms most insisted upon as affording absolute evidence of strangulation, were absent; and in the other not only was there no intestinal obstruction, but, on the contrary, diarrhœa was present. Yet, in each a portion of the abdominal contents was so tightly constricted as to produce a condition of gangrene, partial in one instance and complete in the other. Now, the final diagnosis in each of these cases depended upon a single symptom the recognition of which was fairly simple after a careful examination of the local conditions. In both instances an irreducible painful and tender tumour existed, in which some increase of size and tension had been noticed. These symptoms, although suggestive of strangulation, were, I need hardly say, not in the least conclusive, as a hernia may at any time temporarily increase in size, and become painful without being strangulated.

The conclusive symptom in Case 1 was the entire absence

of the real hernial impulse—a fact quite sufficient, when associated with the suggestive symptoms just mentioned, to make the diagnosis certain, in spite of the singular absence of constipation or vomiting. When I first went to the patient I was told that marked impulse could be felt, but upon examination it was clear to me that, although the tumour moved under the hand rather freely when the patient coughed, there was no true hernial impulse in the proper sense of the word. I therefore at once operated, with the result seen in the description of the case. The detection of hernial impulse in a case like this is obviously a matter of the first importance, because, if in a case of hernia impulse be present, the treatment by some temporising method, such as the local application of cold by the ice-bag or otherwise, is not in itself improper. If, on the other hand, the impulse be absent, as happened here, such a treatment is not only useless but positively dangerous, inasmuch as its only effect can be to postpone the inevitable herniotomy until the patient's condition has become less favourable for operation. At the risk, therefore, of the matter being, I fear, thought too trivial and elementary to be dealt with in this place, I venture to discuss for a moment the symptom which is called "impulse on coughing," because I am not sure that some of you quite understand what the term really means, and also because I have more than once seen the ice-bag applied and violent taxis used in cases of hernia on the strength of this impulse being present when it certainly did not exist. The impulse in ordinary non-strangulated hernia, whether the contents of the sac be omentum or bowel, is *expansile* in character—that is to say, the tumour when the patient coughs or strains not only rises under the hand, but expands in size. In hernial tumours containing bowel this sudden increase in the bulk is principally due to the additional quantity of gas &c. which is suddenly driven into the herniated portion of gut by the act of coughing or straining. In omental herniæ the expansion is partly due to the sudden turgescence in the omental vessels, and partly to the increase of tension in the sac caused by the cough. Naturally, therefore, the amount of the expansion is relatively greater in herniæ containing bowel than in those composed of omentum. So much so is this the case that in a certain number of instances an experienced hand may form a fairly accurate idea of the nature of the contents of a hernial sac by the careful estimation of the amount of expansion in the impulse. The only cases of ordinary non-strangulated herniæ in which this expansile impulse is absent, except upon very careful examination indeed, are those in which the contents of the sac consist only of very old indurated omental masses, which completely fill the sac and block the opening between it and the abdominal cavity. In these cases, if the examination be confined to the lower portion of the tumour, the expansion may not be perceptible, but any more recent portions of the mass lying near the ring will generally afford the expansile symptom to a person possessing anything like a delicate sense of touch who examines the hernia in the right manner—i.e., by grasping the lower part of the tumour in one hand whilst its neck is held between the fingers and thumb of the opposite hand, the patient being at the same time instructed to cough or strain.

In strangulated hernia it is important to understand that absence of impulse does not necessarily mean, as some of you seem to think it does, *immobility* during coughing, for a hernia, even if tightly strangulated, will often move freely under the hand, especially if it be omental. This movement, however, is rather of the nature of a jump or jerk, and is never expansile. There is no symptom which has a more practical bearing upon the treatment of strangulated hernia than the expansile character of this impulse. It may be safely held as a surgical dictum, which you will do well to observe, that *every case of hernia in which any change has taken place in the condition of the tumour, such as increase of size or tension, whilst expansile impulse is absent, should be regarded as strangulated*, and treated accordingly, without waiting for the onset of vomiting or other sign of intestinal obstruction. Had I been less certain of my diagnosis in this case, I might possibly have been tempted to wait for further symptoms, the first of which would have been vomiting, produced in all probability, not by intestinal obstruction, but by peritonitis. A greatly respected teacher of mine used always to say, "Never let a patient with a strangulated hernia vomit twice." Personally I would go further than this, and ask why a patient with a strangulated hernia should, as a matter of course, be allowed to vomit at all. Although vomiting is nearly always present in the cases with which we have to deal in hospital practice, it is certainly not a necessary condition in all cases of strangulation (especially when gut is not involved) in the earliest stage, which may occasionally be recognised before the onset of this symptom by the means I have indicated. When once the diagnosis of a strangulated hernia has been made herniotomy cannot be too soon performed, and the use of the ice-bag or other temporising methods of treatment should be regarded as a cause of harmful delay, as the surgeon ought always to have in view not only the relief of the constriction, which is of course his first care, but also the possibility of helping the patient further by the performance of an operation for the radical cure of the rupture. Any unnecessary delay in operating caused by the waiting for the development of further symptoms—such, for instance, as vomiting—may, of course, so reduce the powers of the patient as to render only the shortest of operations feasible, and perhaps imperil the ultimate chance of recovery; but short of such a serious result as this, it may allow the hernia to be so much damaged by the actual constriction, or lead to such an extension upwards of septic changes involving the peritoneum, that closure of the sac or canal may be indiscreet or entirely unjustifiable.

In Case 2 the distinctive symptom was not the absence of impulse, but the existence of putrefactive crackling in the tumour, which could only have proceeded under the circumstances from gangrenous tissues. The probability of those tissues being some of the contents of the abdominal cavity was so great as to amount almost to a certainty. The difficulty about this part of the matter lay in the extreme indistinctness of this crackling; for although I could feel it without doubt myself, I was unable actually to demonstrate its presence to all of those present. The tumour itself presented the irregular shape often seen in inflamed glandular masses. There were tenderness, some heat, and stabbing pain, but there was no redness. These symptoms, together with the fever and diarrhœa not infrequently met with in septic conditions, might easily have led to a diagnosis of commencing suppuration in the femoral glands, if the emphysematous crackling had escaped notice. Such a mistake might have led to serious results had any delay in the exploration of the tumour followed in consequence. The treatment adopted after the exposure of the gangrenous tissues—viz., the extension of the operation wound (making, in fact, a small abdominal section) and the removal of the appendix through healthy parts—was clearly right. The case is a rare one. In THE LANCET for 1889, vol. i., p. 627, Mr. Annandale records an instance in which a strangulated and perforated appendix cæci occupied a small hernial sac. He removed the strangulated portion of the appendix and fixed its base, which was very adherent, by means of sutures between the pillars of the ring. In that case the local conditions which existed may have made the course adopted necessary, but where possible it is undoubtedly better to remove the appendix and return the carefully cleansed parts into the abdominal cavity, in order to avoid anchoring the cæcum to the parietes in a way which may at any time lead to trouble.

In connexion with Case 1 the complete absence of constipation or other intestinal complication is remarkable, for it is a notorious clinical fact that strangulation of herniated omentum is almost invariably associated with constipation of the most obstinate kind, and generally with all the other symptoms of intestinal obstruction. The absence of these symptoms in this case is at first sight all the more curious when the severity of the strangulation is considered. The explanation of the matter is, however, I fancy, not difficult if due regard be paid to the fact that the acuteness of the symptoms in these omental cases bears a direct relation to the recent nature of the hernia—i.e., the more recent the hernia, the more acute are the symptoms of intestinal obstruction. The strangulation in old cases of omental hernia is almost invariably connected with the descent into the sac of a new piece of omentum, so that, although the hernia itself may be an old one, the actual strangulation is caused by the recently herniated part, and the symptoms are proportionately acute. In the case under discussion there was no recent omentum in the sac, and the constriction of the old indurated omentum did not, therefore, appear

to have caused irritation enough to react upon the bowel and modify its function. The cause of the strangulation, so far as it was possible to judge from the condition of the parts removed, appears to have had its origin in extensive thrombosis of the large veins (? from injury) in the lower part of the omental mass, followed by swelling and rapid effusion into the sac. In this way the relation of the neck of the hernia to the margins of the ring might easily have been altered sufficiently to produce constriction and ultimately complete strangulation. The diarrhœa in the second case, although misleading from a diagnostic point of view was not altogether inconsistent with the condition of parts found at the operation. In Mr. Annandale's case, to which I have referred, the signs of intestinal obstruction were absent, but there was no diarrhœa; the symptom may, however, be met with in the strangulation in a hernia of an intestinal diverticulum (Littré's hernia), and also occurs in partial enterocele (Richter's hernia) when the portion of the circumference of the gut which is strangulated is very small.[1]

The third case to which I wish to direct your attention is in some respects unique in interest, and it is not a little remarkable that the patient should have been admitted and operated upon within a few hours of the occurrence of such an unusual case as the second of the two we have been considering.

CASE 3. *Symptoms of strangulated femoral hernia, with acute intestinal obstruction, caused by glandular abscess in the crural canal; operation; immediate and complete relief.*—A. P——, a woman, thirty-six years old, was admitted into Princess ward on Nov. 24th, 1890. She had always been in good health in every respect until six months before her admission. About that time she noticed a "lump" in the right groin, which varied in size occasionally, but never entirely disappeared. Sometimes, after a hard day's work, the swelling increased very considerably. There was usually a feeling of discomfort, and often there was slight tenderness. A medical man who had once been called in attempted to reduce the tumour, and recommended that a truss should be used, which was, however, not done. On Nov. 21st (three days before admission) the swelling, without any ostensible cause, became rapidly larger than it had ever before been. Pain and tenderness followed; vomiting commenced almost immediately, and recurred frequently up to the time of her arrival at the hospital. The bowels acted for the last time on the morning of the 21st. On admission the patient appeared to be very ill; the pulse was quick, the tongue dry, and the temperature 102·4°. There was copious vomiting of ill smelling semi-stercoraceous material. In the right groin was a rounded mass as large as a full-sized walnut, tense, painful, and so tender that any accurate examination was impossible. The pain was apparently characteristic of a strangulated hernia, for it extended over the lower part of the abdomen, and, passing up from the right groin, it constantly dragged upon the umbilicus. A strangulated femoral hernia was therefore diagnosed, and what was thought to be a herniotomy proceeded with at once. After cutting down through some inflamed tissues, which bled freely, a rounded fluctuating swelling was exposed, having none of the appearances seen about a hernial sac. From this there came, after incision, about two teaspoonfuls of thinnish pus with a small cretaceous mass, evidently from a caseating gland. The lining membrane of this abscess was easily scraped away, leaving a distinct capsule with clean walls. No hernia of any kind was found, nor had the abscess (which was distinctly made out to occupy the crural canal) any connexion whatever with the peritoneal cavity. The plug of connective tissue (septum crurale) in the femoral ring was intact, undisturbed, and entirely normal in all respects, proving conclusively that no hernia could have at any time existed at this spot. The wound was stitched up and dressed antiseptically as usual. Complete relief followed the operation. There was no subsequent vomiting; the pain ceased, and the temperature fell to normal. The bowels acted spontaneously in about forty-eight hours, and rapid recovery followed without a hitch of any kind.

It would, I think, be difficult to produce a case showing more admirably than this one does the impossibility of being *always* right in assuming that any sequence of symptoms, however perfect, is absolutely distinctive of such a condition as a strangulated hernia, which is usually held to be easy of diagnosis. It is well that cases of this kind should occasionally be met with, since they serve as a wholesome warning against taking anything for granted, even in symptoms which seem perfectly clear, and show the necessity of carefully weighing every case entirely upon its own merits. It is true that in the present instance the diagnosis of strangulated hernia when a hernia did not exist brought no harm to the patient, but rather the reverse, since it led to speedy exploration of the tumour and resulted in the immediate relief of urgent symptoms. In a different class of case it might, however, be quite otherwise, for the awkward fact remains that a train of symptoms precise in character and detail, and identical in all respects with those universally taught to be diagnostic of a certain pathological state, existed, whilst the disease itself was altogether absent. I must frankly admit that I am at a loss for any reasonable explanation of the exact relation between the local conditions found in this case and the symptoms of intestinal obstruction. Every surgeon of experience occasionally meets with a case in which the signs of strangulated hernia are produced, in the absence of any such condition, by the irritation of structures connected with the peritoneum (e.g., the inflammation of an empty hernial sac or the irritation or inflammation of an undescended testis); but I have never myself seen nor have I heard of any condition, inflammatory or otherwise, having no immediate connexion with the peritoneum, which has given rise to a sequence of symptoms so perfect as was met with here. The immediate relief which the operation afforded fairly negatives the possibility of the coexistence of the abscess and the intestinal symptoms being merely accidental. It appears, therefore, so far as I understand the matter at present, that there is nothing to be found to answer better as a cause for the relation between the symptoms than reflex nervous irritation, that fertile resource upon which we are apt to rely a great deal too much for the explanation of doubtful causes. In this instance, at all events, I must say that the theory seems too far-fetched to be of much practical account.

In conclusion, let me remind you that symptoms of a deceptive nature are not confined to the class of disease to which the cases we have discussed belong, but occur in connexion with every possible pathological state. Such symptoms are less likely to seriously mislead in rare or out-of-the-way cases than when they come upon you unexpectedly, as they often do, in diseases with which you are continually dealing, and which you may come to regard as universally ordinary and straightforward. It is on this account that I have chosen these examples in a surgical affection so comparatively common as strangulated hernia to illustrate my meaning.

[1] A case in which very acute symptoms were produced by a strangulated appendix, which was neither perforated nor gangrenous, is recorded by Mr. Pick in THE LANCET for 1880, vol. i., p. 801.

THE SURGICAL AID SOCIETY.—The annual meeting of this charity was held on the 8th inst. The Lord Mayor presided, and was supported by a large attendance of subscribers and friends. In opening the proceedings of the meeting, his lordship alluded to the beneficent work of the Society and its claims upon public benevolence. In the twenty-nine years of its existence it had gratuitously supplied 147,121 surgical appliances to 101,051 poor persons. During the past year 9441 men, women, and children were relieved; the largest number recorded in any one year. The year's income amounted to £8478, and, though larger than any previous year, it was inadequate to comply with all the deserving applications for assistance.

THE ELECTION OF DIRECT REPRESENTATIVES.—At a meeting of Messrs. Alderson and Brown's election committee, held on Friday Dec. 11th, it was proposed by Dr. Mead, seconded by Dr. H. C. C. Shaw, and carried unanimously—"That in consideration of their services in coming forward as candidates in the recent contest for the seats of direct representatives in the General Medical Council, Messrs. Brown and Alderson be invited to a dinner to take place about the middle of January next." The following gentlemen were elected as a committee to make the necessary arrangements:—Messrs. J. W. J. Oswald (Chairman), G. B. Mead (Vice-chairman), H. Barkwell, F. H. Corbyn, J. B. Cook, J. Savage, Hugh Woods, and Campbell Boyd (hon. secretary).

A CASE OF

INFECTIVE ENDOCARDITIS, WITH EMBOLI IN THE BRACHIAL, POPLITEAL, AND CAROTID ARTERIES.

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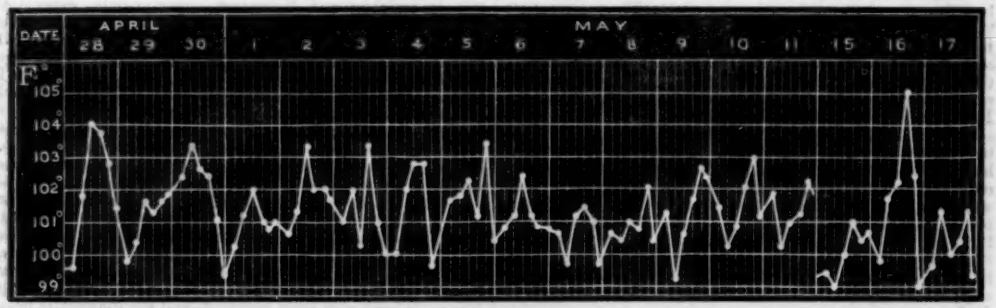
I DEEM the following case worthy of record. Previously to the occurrence of the emboli the diagnosis of infective endocarditis had been made, taking into consideration the peculiar temperatures, the rigors, the profuse sweatings, and the cardiac murmur, with the absence of symptoms of tuberculosis and of enteric fever. These symptoms lasted for fifty-seven days, when an embolus passed into the left brachial artery, and five days later one into the left popliteal. Still, the aspect of the patient was good, and I did not despair of his recovery till the third embolus passed up his carotid artery, followed by right hemiplegia and speedy death. The post-mortem appearances fully confirmed the diagnosis made during life For the notes of the case I am indebted to Mr. B. P. Viret, house surgeon to the hospital.

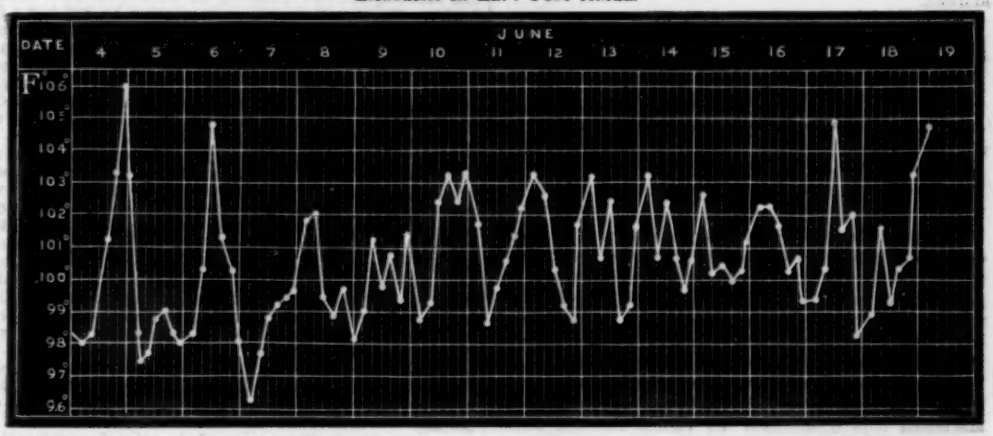
Joseph H——, aged thirty-five, married, a groom and gardener, was admitted into the Dorset County Hospital on April 3rd, 1891, under the care of Dr. Lush. He stated that he had had rheumatic fever when fifteen years of age, and several attacks of rheumatism since. His present illness commenced six weeks ago with pain in the limbs and chest. He has sweated profusely each night and morning, but has continued his employment until admission. At the present time he complains of pain in the knees and calves, also in front of his chest and between his shoulders. His face was somewhat flushed; his tongue clean. Heart's apex beat in the fifth interspace in the nipple line; impulse somewhat heaving; dulness does not extend to the right of the sternum. A loud systolic murmur at the apex, becoming fainter towards the base and lost in the axilla. No cough or dyspnœa; a little sibilus heard over both lungs. The patient is now (8 P.M.) sweating profusely. The knees are red and tender. Pulse 92, of good volume; temperature 101·8°. The urine contains no albumen. Ordered to take fifteen grains of salicylate of soda in an ounce of chloroform water every four hours.—April 7th (10 A.M.): Is now sweating profusely, and has done so twice a day since admission. Temperature each evening 101·8°, falling to normal in the morning. Salicylate of soda discontinued. To take a mixture composed of half a drachm of bicarbonate of potassium, half a drachm of acetate of potash, and one drop of oil of lemon, in an ounce of water, every four hours.—11th: Temperature continues to run up each night to about 102°, falling in the morning to nearly normal. There is not much pain, except in the left side of the chest. Pulse 88.—14th: Is not in much pain, but the temperature continues high—last night 103·8°; this morning 101·2°. He still sweats twice each day. The medicine was discontinued. To take five grains of sulphate of quinine, half a drachm of bicarbonate of potash, and compound tragacanth powder as required, in an ounce and a half of peppermint-water, every sixth hour.—16th: Has pain at times in knees, shoulders, and back; yesterday in right middle finger. Still perspires; perspiration has a slightly acid reaction and a rheumatic odour. Pulse 88. Temperature last night 101·6°; this morning 100·6°.—18th: In no pain; sleeps well. Pulse 84. Temperature last night 103°; this morning 99·6°.—22nd: A good deal of pain last night in legs and shoulders. Temperature 102·2°; this morning 101·2°.—23rd: Is not in much pain. Pulse 84. Temperature last night 101·8°; this morning 100·2°. To take medicine every four hours.—25th: Was kept awake all night by great pain in shoulder. The pain is now less, and the joint is neither red, tender, nor swollen. Sweating continues. Pulse 88. Temperature last night 101·2°; this morning 100·2°. Still a little sibilus in lungs. Ordered a liniment composed of equal parts of the liquid extract of opium and soap liniment.—26th: The temperature last night was 103·6°; this morning it was 103°; on the 27th it had sank to 103·2° and 101·2°.—28th: Is not in much pain; feeling weak. Temperature last night 103·6°; this morning 99·6°. Ten grains of phenazone in an ounce of water to be given when the temperature reaches 102°.—May 2nd: There is still some sibilus over the chest. Pulse 88; respiration 24. Temperature last night 102°; this morning 100·6°.—5th: Is not in much pain. Still sweats profusely morning and evening. Temperature last night 102·8°; this morning 101·8°. Pulse 88. Ten minims of tincture of belladonna to each dose of the mixture to be added.—7th: Pulse 84. Temperature last night 101·2°; this morning 99·6°.—8th: Not so much sibilus in lungs. Temperature last night 102°; this morning 99·8°.—12th: Complains of heartburn. Pulse 88. Ordered to take five grains of carbonate of magnesia, half a drachm of aromatic spirit of ammonia, and half a drachm of compound tincture of lavender, in an ounce of water, as required.—14th: Still sweats profusely.—17th: Last night the temperature rose at about 9 P.M. to 105°. The patient did not shiver afterwards; he perspired freely. This morning the temperature is 99°. No pain.—19th: Temperature last night 103·6°; this morning 98·8°.—21st: Had a rigor this morning, commencing at 9.15 and lasting to 10 A.M. Temperature rose to 104·6°. Afterwards he vomited about a pint of yellowish fluid. Is now perspiring profusely. Tongue somewhat coated. Pulse 108. To be given the following mixture: five grains of sulphate of quinine, twenty grains of citric acid, twenty minims of aromatic spirit of ammonia, half a drachm of tincture of orange, and half a drachm of syrup of orange, in an ounce and a half of water, with one scruple of bicarbonate of potash.—23rd: No fresh rigor or vomiting. Complains of pain in throat; nothing to be seen. Temperature last night 101°; to-day 99·8°. Pulse 88.—26th: The temperature rose last night at 10 P.M. to 104·6°; in eight hours it fell to 98·4°; is now 99°. Pulse 96.—28th: The highest temperature yesterday was 104°; respiration somewhat sighing. Temperature 100·2°; pulse 113. The phenazone mixture to be discontinued, and six grains added to each dose of the effervescing quinine mixture.—30th: Another rigor last evening. At 8 P.M. the temperature rose to 105·4°; the pulse was 132. This morning the temperature was 99°. The pulse is now small, rapid, and hardly to be counted; the heart's pulsations counted 160. Had a feeling of shivering at 9.45 A.M.—31st: 11 A.M.: Heart's pulsations 172 3.15 P.M.: Pulse cannot be felt in the left wrist, but can just be felt in the left brachial; pulse in right wrist about 128; heart's pulsation 186. If he turns on his left side he has pain in the cardiac region. Five grains of sulphate of quinine, twenty grains of citric acid, twenty minims of aromatic spirit of ammonia, eight minims of tincture of digitalis, half a drachm each of the tincture and syrup of orange, in an ounce and a half of water, with twenty-five grains of carbonate of ammonia, to be taken every four hours.—June 1st: Passed a good night; is not in much pain. Pulse in right wrist 172, stronger; heart's pulsations also 172; pulse quite absent in left wrist.—2nd: Temperature last evening 101·6°; this morning 99·8°. Is now sweating profusely. Pulse in right wrist 120, somewhat full and thrilling, and with some strength; pulse more plainly felt in left brachial, and can be feebly felt in the left radial artery; systolic cardiac murmur is plainly heard.—3rd: Pulse can be counted on left wrist (108). Temperature last night 102·6°; this morning 102·4°.—4th: Slept well last night. Is in no pain. Pulse 96; respiration 24. Temperature last night 97·6°; to-day 98·2°.—5th: Had a rigor last evening, commencing at 6 P.M. Patient complained of much pain in the left calf. The left popliteal artery can be felt beating, but there is no pulsation in the left posterior tibial at the ankle. The left leg is decidedly colder than the right. Pulse 92; temperature normal.—6th: Is feeling better this morning. Pulse in right wrist 88, of fair volume, somewhat thrilling, just perceptible in left wrist. Apex murmur plainly heard. Temperature last evening 99·4°; this morning 98·4°.—7th: Temperature rose last night to 103·8°; is normal this morning. Pulse 88. Is sweating profusely. No pulsation felt in left posterior tibial at ankle.—8th: Yesterday, about midday, temperature fell to 95·8°, and extremities became cold. He rallied after being given brandy and hot milk, and the application of hot-water bottles to his feet. Is better this morning. Temperature 99·6°; pulse 88.—9th: Temperature rose last night at 8 P.M. to 102·8°, and at midnight to 103°; this morning at 4 A.M. it was 99·4°, and at 8 P.M. 98·4°. Palms dry; cheeks flushed. In no pain now, but has had some at the right inner ankle. Pulse 88, full, somewhat thrilling and incompressible. Pulse in left radial not felt, but plainly felt in the brachial above the elbow. Left leg somewhat colder than right. No pulse in posterior tibial,

but is felt in left anterior tibial, at dorsum of foot, left popliteal, and right posterior tibial arteries. The dose of tincture of digitalis to be reduced from eight to six minims.—10th: In no pain. Highest temperature last night was 102°. No return of pulsation in left posterior tibial. Temperature 99·4°; pulse 88.—11th: Temperature rising; at 8 A.M. 103·2°; last night 100°. Did not sleep well. Pulse in right wrist 88, somewhat jerking. Face flushed. incompressible; this morning the pulse is 88, somewhat irregular. Passed a fair night. Is in no pain, except a little in the right wrist. Temperature 98·8°.—15th: Pulse in right wrist 88, regular. Sleeps and takes food fairly well. Temperature 99·4°; last evening 100·8°.—16th: In no pain; tongue somewhat coated. Pulse 84; can be counted on left wrist, and faintly felt in left posterior tibial at ankle. Respiration 24. Temperature 100°; last

EMBOLISM IN LEFT BRACHIAL.



EMBOLISM IN LEFT POST-TIBIAL.



Skin somewhat moist. Pulse just perceptible in left wrist.—12th: In much the same condition. Still sweats profusely twice a day; is in no pain. Pulse 92. Temperature last night 101·6°; to-day 100·4°.—13th: Has slept fairly well. Is in no pain. Pulse in left radial can be just felt. Pulse 88; respiration 24. Temperature last night 99·2°; the same this morning.—14th: The highest temperature last night was 103·2°. The pulse at that time was 100, full and evening 101·8°.—17th: Complains of some pain on the radial side of the right wrist. Temperature 100·2°; last evening 100·6°. Pulse 100.—18th: Pulse 88, more distinctly perceptible in the left radial, somewhat feeble in the right. Temperature 100·2°; last evening 100·6°. Two additional minims of tincture of digitalis to be added to each dose of medicine.—19th: About 4.40 P.M. yesterday the patient commenced shivering, and be-

came generally blue, except his ears and his right hand, which were white and cold. His breathing became very rapid and laboured. He soon rallied, and at 5.5 P.M. his respirations were 36; pulse in right wrist 136. He seemed more deaf, and did not answer questions readily. In about half-an-hour his temperature had risen to 105·8°. He complained of no pain. At 8.15 P.M. his temperature had fallen to 105·2°. Pulse 136. No dulness or abnormal sounds in the lungs. He did not pass a very good night. This morning he seems rather strange in his manner and tries to get out of bed; has perspired much during the night. The temperature this morning is 98°. The pulsation in the left carotid is rather more feeble than in the right, and the grasp of the right hand is weaker than that of the left. He can move both the right arm and leg. 5.45 P.M.: Aspect bad; is perspiring; respiration 40, somewhat laboured; pulse 104. 9.45 P.M.: Right arm and leg are now completely paralysed; speech somewhat thick; tongue protruded to left side; takes food, but cannot swallow well.—20th, 8.15 A.M.: The patient had not slept during the night; he had passed urine unconsciously; the temperature had risen, and at 8 A.M. was 104·8°; at 3 A.M. the breathing became rapid and stertorous, but he was conscious till about 7.30. He was now lying on his back, sweating profusely; face cyanosed; respiration 80, very noisy; pulse 160, and hardly to be felt; he was rolling his eyes from side to side occasionally; was able to take food. At 9.55 A.M. the patient died.

Post-mortem appearances ten hours after death.—Body fairly nourished; no bed-sores; rigor mortis in legs, not in arms. Chest: Old pleural adhesions on each side; lungs natural. Heart: Pericardium completely adherent. Heart large, weighing 24 oz; muscles firm; right side natural; left ventricle considerably hypertrophied and dilated; mitral orifice large, admitting tips of four fingers; one cusp of the mitral valve completely destroyed by ulceration, with adherent clots. Abdomen: Spleen enlarged, weighing 26 oz., containing several recent infarcts, some partially breaking down in the centre; at the lower part of the viscus was a cavity about the size of a Tangerine orange, with roughened walls, and containing a reddish turbid fluid. Kidneys large and soft, both containing numerous infarcts. Liver natural. Bloodvessels: In the left brachial artery, just above the superior profunda, was a clot, partially decolourised, extending about an inch and a half above the profunda and for a short distance downwards into that vessel. The left popliteal artery contained a clot reaching about an inch above the bifurcation, and passing down into the posterior tibial artery. Head: Examination not allowed.

A SIGNIFICANT FACT IN THE DIAGNOSIS AND INTERPRETATION OF THE ALBUMINURIA OF ADOLESCENTS.

BY CLEMENT DUKES, M.D., B.S LOND.,
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS, PHYSICIAN TO RUGBY SCHOOL, AND SENIOR PHYSICIAN TO RUGBY HOSPITAL.

(Concluded from page 1329.)

THE significant fact, which has proved a valuable means of diagnosis to me, and which, I think, throws a vivid light upon the interpretation of these cases, has occurred in my practice with sufficient frequency during the last year or two to be unmistakable. I proceed to explain. It has been a long-established rule at Rugby that the whole school should meet together for morning prayers in the school chapel at 7 A.M. An alteration in this custom was made a year or two ago, as the head master naturally desired to address the assembled boys occasionally on various common school subjects. It was thought that this hour would be most opportune, without calling the whole school together on purpose, which, in the hard work incidental to school life, would have been exceedingly difficult to arrange. It was, therefore, settled that on two mornings in the week morning prayers should be held in the large hall, so that the head master might carry out his desire at the termination of prayers. Whenever this hall had been previously used for large gatherings, seats had been transferred from other class-rooms, and chairs were procured elsewhere. At the commencement of these "fifteen-minute" meetings, therefore, no seats were provided, as it was deemed no great hardship to stand for this brief period. The arrangement was in existence for a year or two, during which time the following events occurred. While it was exceedingly rare for a boy to faint during morning prayers in chapel, it became a common occurrence when prayers were held in the large hall where the boys had to *stand*. It was at first naturally assumed that the cause resembled that of the fainting incidental to Militia training and Volunteer encampments, especially church parades, through the constrained position of "standing at attention." (Are these similar cases, undiagnosed as yet?) Then it was assumed that it arose from the hall being hot and ill-ventilated compared with the chapel. But when I found that it was not the delicate boys who fainted, and that the sufferers had hard rigid pulses, I at once saw that it was owing to early albuminuria; and, on analysis, this supposition proved to be the fact in nearly every instance. I have already referred elsewhere[1] to such cases, but here we had a most marked class of them—boys getting up at 6.40 A.M. and rushing down to school. If they assembled in chapel where they could sit, faintness rarely occurred. The same set of circumstances existed, with the exception that the boys were required to stand for a few minutes, and thus by this differential examination the cause was at once discovered and the boys submitted to treatment. But seats have now been provided, and my diagnostic helpmate has failed me, so that the cases have to be traced in other and less pronounced ways. Could a more classical set of circumstances be presented, not only for the purpose of diagnosing cases, but also for their interpretation? Here we had a large number of boys going to bed and lying in the horizontal position for about eight hours and a half, and suddenly assuming the vertical position in the morning, often accompanied doubtless by a quick run of a hundred yards to school, and a flight of stone steps to be mounted on the mornings when they assembled in the large hall, and the circulation proving itself unable to meet the altered circumstances, and failing in the attempt. Is it not, therefore, perfectly manifest that these early cases of albuminuria, as I have already endeavoured to show, arise from the condition of the circulation pure and simple? Any such stress upon the circulation, such as active exertion, will under similar circumstances reveal the presence of albumen in the urine.

I may, perhaps, relate with advantage a single instance even more remarkable, arising from a similar cause. A boy was standing near his mantelpiece between 11 and 12 A.M., and suddenly fell down, cutting the back of his head on the fender. The question arose as to whether he had had a fit or fainted. As soon as I felt his pulse I was confident that it was one of those cases of fainting arising from albuminuria, and on examination this proved to be the case, and he recovered eventually under treatment. The main characteristics of these cases of early albuminuria reside in the infinite variety of their cause, in the quantity of albumen presented, and in their duration.

As to the *causes*, we may say that whatever entails extra work upon the kidneys at once hampers their circulation. For example, a chill, which throws upon them the work of the skin; a constipation, which acts in a similar manner; overfeeding, which gives them stress of work; also it may arise through mal-assimilation caused by indigestion, and hereditarily imperfect organs, entailing imperfect elimination of impurities from the blood, with the resulting transmission through the kidneys of irritating ingredients—setting up, therefore, increased arterial tension, with the production of transient, or even permanent, albuminuria if the condition be long continued. The amount of albumen varies from day to day and from hour to hour, sometimes the merest trace being present, while at the next examination the urine may become almost solid on boiling.

As an example illustrative of *duration*, I may mention that I have under my care at the present time a boy aged fourteen, who was sent to school at the seaside more than two years ago, on the recommendation of Dr. Broadbent, on account of this ailment, and in whose urine albumen is still present from time to time, and for more or less prolonged periods in considerable quantities. His father even

[1] Brit. Med. Jour., May 9th, 1886.

can tell when it is present from the boy's appearance alone.

Another case which I have now under my care, and in respect of which I have grave anxiety as to the future, arose in the following way. The boy was returning to school for the summer term, and as it *was to be* the summer term, he could not want, and thus removed, his flannel vest before starting, leaving his overcoat, which he had worn through the vacation, at home also. This happened in winter weather, although May was the actual month. He took cold on the journey; and although this occurred last May (1890), his urine is now for days together loaded with albumen; it is then absent for a day or two, then persistent all day, and so on.

At the present moment I have under my care a young lady suffering from this characteristic albuminuria. Her history is, that she had not been well since she attended two balls on consecutive nights during the cold weather some three weeks since, when she probably became overheated and was insufficiently clad, she having removed her under-vest. Her aspect had become muddy, she had lost her spirits, and she complained of always feeling tired. I found her pulse hard, and her eyelids œdematous in the morning. I at once diagnosed albuminuria, and found the albumen persistent throughout the day. It disappeared altogether during continuous decubitus, and is now not present in any urine except that passed after breakfast—that is, in the first urine passed after she has been up for an hour.

In another case which I watched for several years (1886 to 1890), and which was one of the most troublesome, I gradually elicited the following remarkable fact, which I have never found before or since, and the meaning of which I have not yet satisfactorily interpreted. Whenever the urine was free from albumen he felt ill; whenever it was present he felt well. He used to tell me beforehand whether I should find albumen or not. Whenever he looked ill and miserable, and felt ill, he was right,—no albumen was present. But whenever he felt quite well he would laugh and say that I should find, in consequence, a quantity that morning. The albumen was still present a year or two after he left school. Since then I have again examined it, and there was not even a trace. But this condition of kidneys does not exclusively occur in adolescents, for last year a chemist, forty-five years of age, consulted me with albuminuria, which was intermittent for several weeks. The case behaved exactly like an ordinary case of early albuminuria as to feeding and decubitus, and he subsequently quite recovered. Its origin dated from a drive on a cool summer evening, when the patient, unaccustomed to driving, omitted to wear an overcoat. Moreover, he had had a similar attack a year or two previously, and recovered.

An old Rugby boy consulted me not many weeks ago, stating that he was said to be suffering from overwork, and that he was greatly perplexed as to the course to pursue. He had intended to present himself at one of the universities for a scholarship, but he could not read for even a few moments consecutively without becoming dazed and suffering from intense headache. His condition, together with his disappointment at the blighting of his prospects, caused him considerable distress, and he came to ask my advice, as I had known him for some years while at school. As he unravelled his story, without any comment from me, my impression was that he was suffering from hypermetropia; but when I put my fingers on his pulse, I felt convinced, owing to the marked arterial tension, that his cerebral symptoms were toxæmic, and that the case was simply one of early albuminuria. Certainly, no overworked brain ever possessed such a pulse. However, I made a complete examination, and found the characteristic heaving heart's action, as well as the rigid arteries, and could discover no other fault until I examined his urine, when the source of his trouble disclosed itself. His sight was normal. With weekly doses of blue-pill, and daily doses of sulphate of soda and bicarbonate of potash, his symptoms soon disappeared, and he could resume work as he desired without discomfort. He obtained his scholarship, and is now at the university. On subsequently referring to my records, I found, what I had forgotten at the time, that he was one of my old cases of albuminuria when at school.

Judging from past experience, and as I pointed out many years ago (1883[2]), I am persuaded that many cases of assumed overwork should be classed under the same category as this case, and that, in their treatment, a dose of blue-pill is far more efficacious for their cure than cessation from work.

The following points present themselves as the result of this consideration of the subject:—1. It is not safe to make a diagnosis in any patient without an examination of the urine. 2. Are not all cases of early albuminuria, in their early stage, identical with the class of cases I have described? 3. If so, it is perfectly clear that these cases of early albuminuria, which are so common in the young, constitute the early stage of what eventually may become developed into the chronic disorganisation of the kidney which is termed Bright's disease. 4. Would it not be well to come to some understanding as to its nomenclature, so that a uniform and appropriate name may be assigned to this disease, and that it may cease to be termed "functional"?

The gist of the whole matter seems to be this: That where the hyperæmia of the kidneys is severe the albuminuria is persistent, in whatever position the body may be placed, whether at rest or not, and whatever diet may be partaken; while if the hyperæmia be slight, from the cause having been trivial, or from a severe attack which is passing away, then the albuminuria only shows itself when the body assumes the vertical position, or under exertion, or after a full meal; but if the hyperæmia be prolonged, however slight in degree, the albuminuria gradually becomes persistent, owing to the permanent dilatation of the blood-vessels, and tends to destruction of the kidneys. As in the eye the inflammation may be so severe that the eyelids cannot even be opened, or may be so slight that there is no indication of any hyperæmia except under work; so here the inflammation of the kidneys may be so severe as to cease to work, as in acute nephritis, or so slightly hyperæmic that it is only elicited under a stress of its circulation, such as arises in assuming the vertical position, undergoing active exertion, or partaking freely of food, which is a pathological condition.

Rugby.

[2] The Book of Health.

EXCISION OF THE CONDYLE AND NECK OF THE INFERIOR MAXILLA FOR OSSEOUS ANKYLOSIS OF THE RIGHT TEMPORO-MAXILLARY ARTICULATION.

BY DAVID M. GREIG, M.B., F.R.C.S. ED.

THE rarity of osseous ankylosis of the temporo-maxillary articulation makes it desirable that all cases of this condition should be placed on record, especially where operative measures have been adopted for its relief. In few text-books of surgery is the deformity even referred to, while in fewer still is any operation described.

J. C——, male, aged twelve years, came under my care in February, 1890, complaining of stiffness of the jaw and inability to open his mouth. The following history was elicited. Apart from anything bearing upon his present condition, he has always enjoyed good health. In 1885 he had scarlet fever. This was accompanied by right suppurative parotitis, which was followed by gradually increasing impairment of movement at the right temporo-maxillary articulation. In 1887 he was able to separate the teeth for a quarter of an inch, and this was increased to one inch by forcing the jaws open, under chloroform, by means of a wooden wedge. Although this treatment was afterwards continued, the jaws were soon approximated more firmly than formerly, until the teeth could not be separated at all.

In February, 1890, his condition was as follows:—He was well-nourished, and presented nothing noteworthy, except in connexion with the condition of the right temporo-maxillary articulation. A hard swelling, indicative of former inflammatory mischief or periostitis, extended from this articulation to the angle of the jaw, and produced undue prominence of the right cheek. The skin near the angle of the jaw was marked by cicatrices. The incisor teeth were directed forwards, leaving a space one-eighth of an inch wide between them. Through this opening the patient had

to force all solid food after crushing it with his fingers, and the displacement of the incisor teeth had evidently been caused by the periodic pressure thus exercised upon them. The margin of the lower incisor teeth was posterior to that of the upper. The appearance he presented is shown in Fig. 1.

FIG. 1.

Having again, under chloroform, attempted unsuccessfully to separate the jaws by the use of wedges, I decided to excise the condyle and neck of the jaw on the affected side. The bone was exposed by a vertical incision extending from the zygoma above to the level of the tragus below. On pushing aside the periosteum the ankylosis was found to be osseous, and the bone much thickened. The osseous mass was snipped through with bone forceps below at the level of the neck of the jaw, and above at the level of the articulation, and the piece of bone thus separated was levered out. As my bone forceps were rather large, the incision had to be prolonged slightly downwards, to gain sufficient room to work in. Though the teeth could now be separated slightly, it was not until the coronoid process had been divided that they could be separated for a satisfactory distance. There was no hæmorrhage of importance, only the transverse facial artery requiring ligature. The wound healed by second intention in about three weeks. His appearance twenty months after the operation is shown in Fig. 2. He has perfectly useful,

FIG. 2.

though one-sided, masticatory movement, and is able to separate the jaws about one inch. In extending the incision downwards, some branches of the facial nerve had been divided, as the operation was followed by partial paralysis of the orbicularis palpebrarum (which has since almost entirely passed off), and of the levator labii superioris, levator anguli oris, and zygomatici muscles. The function of the last-named muscles is taken by the facial fibres of the platysma myoides. The parotid duct may have been divided, and, if so, no inconvenience has resulted therefrom, possibly from the former parotitis having more or less disorganised the gland.

Remarks.—Osseous ankylosis of the temporo-maxillary articulation is caused by any inflammation involving the joint. Gout and rheumatism, especially chronic rheumatoid arthritis, are probably the most common causes in the adult,[1] while suppuration connected with the exanthemata is the most common cause in children. Extension of inflammation of the middle ear through the Glaserian fissure has been recorded as a cause,[2] and it also occasionally follows cancrum oris and mercurial salivation.[3] Injury is a rare cause; but Mr. Harrigan has reported[4] a noteworthy case of this in which the movements of the jaws were not permanently interfered with until twenty months after receipt of the injury. The operations devised for the relief of osseous ankylosis of the temporo-maxillary articulation are mainly three—viz., Rizzoli's, Esmarch's, and Humphry's. Rizzoli's method consists in simple division of the jaw in front of the cicatrix from within, but the great tendency to reunion of the bones renders this operation somewhat uncertain in its results. Esmarch's operation consists in removal of a wedge shaped piece of bone at the junction of the ascending and horizontal rami, the incision being made along the lower border of the horizontal ramus. Mason[5] and others have recorded cases of this operation which have yielded very satisfactory results. Sir George Humphry[6] was the first to excise the condyle of the lower jaw for osseous ankylosis, and several successful cases of this operation have since been recorded. Mr. Page[7] has described and figured such a case in which partial facial paralysis similar to that occurring in my case followed the operation. Occasionally, when bilateral ankylosis exists, one of the above operations requires to be performed on both sides; and Mr. W. H. Bennett[8] has recorded a remarkable case of this kind, in which after repeated operations he excised the ascending rami on both sides, with a result which was wonderfully satisfactory.

Dundee.

[1] Ashhurst: International Encyclopædia of Surgery, vol. v.
[2] C. Heath: Injuries and Diseases of the Jaws, 2nd edition.
[3] Noble Smith: The Surgery of Deformities.
[4] Omaha Clinic, September, 1889.
[5] F. Mason: The Surgery of the Face. 1873.
[6] Assoc. Med. Jour., 1856.
[7] Brit. Med. Jour., March, 1889.
[8] Clinical Society's Transactions, vol. xxii.

TRAUMATIC HYDRONEPHROSIS.

BY J. J. KNOX, M.A., M.B., B.C. CANTAB., M.R.C.S.

CASES of traumatic hydronephrosis appear to me to be of sufficient variety to warrant the publication of the following example of the disease, in which drainage of the cyst resulted in a complete cure. On referring to the files of THE LANCET I can only find mention of the subject on three occasions since the year 1880. In the issue of Jan. 22nd, 1881, there is the case of Mr. Croft, in which repeated aspiration ultimately effected a cure. On April 10th, 1886, there is the account of a paper read by Dr. Lowe before the Medical Society, and here several cases are mentioned, the means adopted for their cure being tapping or massage. The third account is that of the discussion opened by Dr. Goodhart before the Clinical Society, and published in THE LANCET of Dec. 6th, 1890. Here cases are narrated in which a cure resulted after having been allowed to take their own course, while there were other measures advocated, such as aspiration and nephrectomy. The case which I am about to record seems to me to be especially interesting owing to the large size to which the tumour attained in the course of a few weeks. It is as follows.

G. B——, aged forty-two years, a horse-driver on the Midland Railway, was engaged in his occupation on the afternoon of Aug. 29th, 1890, when he was injured by being crushed about the lower part of his abdomen. The injury was caused by the chain by which his horse was attached to a waggon striking him over the front of the abdomen and

squeezing him against the front of the waggon, in which position he was dragged some little distance before he could be liberated. He did not at the time think seriously of his injury, but was induced to go home. On his way there he had a severe attack of abdominal pain, so went to bed. Here he stayed for three or four days, having occasional attacks of pain, and passing blood in his urine on two or three occasions. He was then ordered by the medical man who attended him to get about as much as possible, and this he endeavoured to do, though at times the pain would recur so severely as to render him unable to walk. About three weeks after the accident he first noticed that his abdomen had begun to enlarge. He was then recommended to poultice the tumour, and later on was ordered to have it rubbed frequently with camphorated oil. After daily friction had been kept up for about three weeks, it was thought one day that the swelling had somewhat diminished, but this was, at all events, only transitory, for soon it began to enlarge again, and more rapidly than before. The man was therefore recommended to go into a cottage hospital. Here he lay in bed for a fortnight, and was seen in consultation with another medical man. The tumour was aspirated, but nothing drawn off, so he returned to his home, and on Nov. 17th, 1890, I was called in to see him. I found him to be well developed and of fairly healthy appearance. There was a large swelling occupying the left side of the abdomen. It extended from the symphysis pubis and Poupart's ligament below to the ribs above, where its outline was lost. Its border slightly overlapped the linea alba, and was well defined, as indeed it was below; the left loin was more prominent than the right. There was dulness on percussion over almost the entire surface of the tumour, and it commenced above at the sixth rib in the anterior axillary line. The only point at which resonance could be obtained was over a small portion towards the lower and inner aspect, and here there was gurgling on palpation. The swelling was extremely tense, and a distinct thrill could be obtained on flipping it; fluctuation was thought to be present, but was not marked. The abdomen measured forty-six inches and a half in circumference at the level of the umbilicus. The man complained of occasional attacks of pain, and he suffered severely from the discomfort arising from the presence of so large a tumour. He had anorexia, occasional nausea, and constipation; he was irritable, and slept badly. The urine was normal in quantity and quality.

On November 21st, assisted by Drs. Evans and Knox, of Bakewell, the former of whom kindly gave the anæsthetic, I made a vertical incision over the front of the tumour, about three inches in length, at the level, and a hand's-breadth to the left, of the umbilicus. The peritoneal cavity was opened and the hand introduced with the intention of exploring the attachments of the tumour, which presented in the wound. It was found to extend downwards into the iliac fossa; above, it disappeared under the ribs, and its upper limit could not be traced; internally it was free, and in the outward direction the peritoneum was found to be reflected from it on to the abdominal wall, about two inches and a half from the incision. A piece of intestine was seen attached to the surface of the tumour, and this on examination proved to be the colon. The stomach, small intestines, and omentum were pushed over to the right side. A trocar and cannula were now introduced into the tumour, and the withdrawal of the trocar was followed by the evacuation of a large quantity of a limpid fluid, darkish-red in colour, and containing a few flakes of fibrin. On the cessation of the flow the puncture was enlarged to the length of the skin incision. The sac was emptied and sutured with stout silk to the skin, the parietal peritoneum being included in the sutures. The opening in the cyst was then plugged with strips of alembroth gauze, iodoform and alembroth wool being also used in the dressings. The operation lasted rather more than an hour. The amount of fluid evacuated was estimated at about six quarts, but it was unfortunately thrown away before it could be accurately measured and examined.

The subsequent history is as follows. No adverse symptoms resulted from the operation. There was retention of urine for three days, requiring the use of the catheter. At first there was a copious discharge of watery fluid from the wound, having a strong odour of urine. This continued for nearly three weeks, and then gradually subsided as the wound began to close by granulation. A month after the operation there was still a slight discharge, and the wound had almost healed. The man had begun to walk about the house, and was rapidly gaining strength. A month later the discharge had ceased entirely, and there was the merest sinus left. This quickly healed, and the man was walking about apparently quite well. The abdomen measured thirty-two inches in circumference, and there was resonance on all sides up to the cicatrix. There had been no reaccumulation of fluid. The urine throughout contained no pus, and was passed in sufficient quantity. Fourteen weeks after the operation the man expressed his intention of resuming work. He had gained in strength very much, and had increased two stones in weight since the operation. There was no apparent reaccumulation, and the cicatrix had retracted very much, causing a cupping of the abdominal wall at the point.

East Molesey.

ON THE EFFECTUAL AND SPEEDY CURE OF INFLUENZA.[1]

BY JOHN CRERAR, M.R.C.P. EDIN., &c.

[IN the course of his address Mr. Crerar said that he had formed a new theory of the treatment of acute infective diseases, based on the "analogy of nature," whereby is meant such an inference, for example, that the earth is globular from observation of the uniform shape of the other heavenly bodies. Applying this to the study of micro-organisms, he infers that their life and reproductive activity depend upon their inhabiting suitable nutrient media under fit conditions.] Thus Klein tells us that a cubic centimetre of beef-tea, kept in an incubator at a temperature of 98° F., and peopled by bacilli, multiplies its population 80,000 times in the first twenty-four hours, 450 times in the second twenty-four hours, and only five times in the third twenty-four hours. We thus find that, as the food supply becomes diminished, and the peculiar product of the fermentative process increased, the reproduction gradually declines and ultimately disappears. During the process of reproduction and growth of a micro-organism there is a peculiar substance excreted, or formed, which is baneful to its own microbe, and as this substance increases in quantity it diminishes the vitality of the microbe, and when it reaches a certain proportion it destroys the life of its microbe. When the yeast fungus is placed in an infusion of malt, it grows rapidly, at a suitable temperature, until the alcohol formed in its presence accumulates to 20 per cent. of the whole quantity of the liquid; the alcohol then arrests the growth of the fungus, and the alcoholic fermentation proceeds no further. In the same way, Dr. Burdon-Sanderson has shown that the peculiar secretion of a bacillus is very destructive to the bacillus itself. These facts are of the highest importance when pathogenic fungi are considered in their relation to disease. The application of such facts to the treatment of infective diseases would, then, consist in bringing about in the system a change in the environment of the microbes analogous to that which is spontaneously effected by their own activity, since they apparently excrete products which in sufficient quantity are inimical to their own existence. Hence the possibility of a disease exhausting itself, as it were, without any treatment, provided that the vital powers of the patient can resist the poison more than the microbe that produces it.

It appears, then, that we are continually liable to attack, but if we can by any means (and I think we can) so alter the state of the body as to make it intolerable to the minute invaders, we secure a valuable truce and gain time to allow the organism to build up a vitality high enough to get beyond the reach of our remorseless foe, and we may thus save our patient. Hitherto the search for such a desirable agent has been chiefly carried on in connexion with the cultivation and study of the pathogenic microbe. I propose to look for a similar substance in connexion with the changes which invariably take place in the system of the patient during the acute stage of disease — I propose, in fact, to transfer a baneful and death-producing plant — the pathogenic fungus — from its con-

[1] Being the substance of the Presidential Address delivered to the members of the Border Counties Branch of the British Medical Association at the annual meeting held at Maryport, July 16th, 1891.

genial soil and climate in the tropics, to the uncongenial soil and climate of the Poles; and I confidently expect that, in its new situation, it will not long retain its power to do harm. I have practically applied this theory to the treatment of influenza with the happiest results. In the epidemic of 1889–90, I was face to face with an extreme case of this disease, when it was quite clear to me that something more than treatment upon general principles was necessary if I wished to save my patient. A process of reasoning, similar to what I have tried to explain, occurred to me at that time; and acting promptly on the indication to which it pointed, I artificially altered the prevailing state of the patient, with the result that the disease very speedily disappeared. I subsequently repeated my new line of treatment in hundreds of cases, with the same fortunate result. During the present epidemic (1891) I have pursued similar tactics with identically similar consequences. Let me briefly explain what has been occurring. I am called in to see a patient. I find him with a flushed, woe-begone face; intense frontal headache; increased temperature, at the same time perhaps that he is complaining of cold or shivering; a quick pulse, great prostration, and unspeakable distress. I prescribe, and when I visit him next day I find all the acute symptoms gone; no distress, pulse and temperature normal, and the patient comfortable, but weak. On inquiry, he declares, in nineteen cases out of twenty, that the relief was obtained after the second dose of the medicine—that is, within four or six hours after the commencement of the treatment. Let me instance two cases as typical examples of many others.

CASE 1.—Mr. T —— is extremely ill, and believes himself to be dying; pulse 117, with the other acute symptoms mentioned. I venture to assure him that he will be nearly well to-morrow. Next day I find him quite relieved, and the pulse reduced to 61.

CASE 2.—A. F——, a young married woman, was taken very suddenly ill, and when I first saw her she was raving and could not be made conscious of my presence. The next morning she was well, but weak, and I was assured that the second dose of the medicine marked the time of the amendment. On the third day she was quite well, dressed, out of bed, and attending to her duties in the house.

But I have not yet stated the exact nature of my *modus operandi*. Very important results can be obtained through very simple means. In the days of Sir Thomas Watson, the most intelligent answer to the question, "What is the best cure for acute rheumatism?" would be, "Six weeks in blankets, aided by drugs administered on general principles." But the salicylate of soda has changed all that, and has given us a short cut towards getting rid of the excruciating tortures of acute arthritic inflammation of a rheumatic nature: and so with other affections. Having regard to the essential state of a severe attack of influenza, I conceived that I would get the most effective antagonism in greatly increased alkalinity, and the *bicarbonate of potash* was the first agent that I thought of. This salt has many advantages. It is not unduly stable to make it difficult to break up in the system. It is also readily eliminated, and thus soon leaves the system; so that the danger of potash poisoning is reduced to infinitesimal proportions. Having found this salt to answer all my purposes, I have not looked for another, although, according to my theory, other remedies of a similar nature might easily give like results. I give liberal doses (thirty grains) in a teacupful of milk every two or three hours. I add a few drops of the tincture of capsicum, but this is not at all essential.

A word or two of caution. In two or three cases the action of the heart was weakened to an unpleasant degree; but digitalis and the aromatic spirit of ammonia quickly restored normality. Diarrhœa also sometimes supervenes, but is effectually met by Dover's powder. In cases where weakness was induced by previous disease, or where some other disease was a concomitant, or where pregnancy existed, the action of the remedy was somewhat retarded, but not rendered by any means less certain. Where the salt was intermitted too soon, the symptoms returned; but they readily gave away again on the resumption of the treatment. I trust that those who have the opportunity, will test the accuracy of my statements by careful clinical observations, as I feel confident they will obtain equally favourable results; for the remedy acts uniformly and satisfactorily: *tuto, cito, et jucunde.*

Maryport.

CURRENT "FROM THE MAIN."

BY W. S. HEDLEY, M.D.

WITH the electric light circuit at our doors, the question of utilising it as a source of supply for electro-therapeutic work is literally brought home to us. I propose at present merely to point to some methods by which this can be done with comparative ease and safety. The *advisability* of so using it is another and larger question, which it is not intended to enter into now.

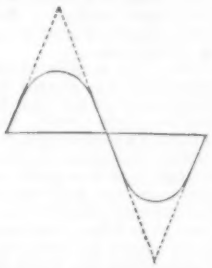
We have, first of all, to face the fact that the light current is generally supplied to houses at not less than 100 volts, and that the quantity used for even a single incandescent lamp is much in excess of that ordinarily required for medical purposes. It is manifest, therefore, that some modifying arrangement must be adopted before the current from the ordinary light circuit can be used with safety. Let us take an instance—a house containing incandescent lamps requiring fifty watts to properly light them. The electro-motive force of the supply is 100 volts, so the current must be half an ampère or 500 milliampères. Many lamps now take only thirty watts, making the current 300 milliampères. We may therefore assume that the safety-fuse of such a lamp (and every lamp ought to be so protected) would act if more than 500 milliampères passed, and automatically break the circuit, so that no harm could be done to the lamp. Here, then, we have the maximum current obtainable from a single lamp lead of an ordinary light circuit—viz., 500 milliampères. This maximum for medical and surgical purposes of course leaves an excessive margin, and could doubtless be reduced if desired by using a safety-fuse adjusted to break the circuit with a smaller current; but considering the power that must be available for, say, the di-polar bath, and the current strengths that have been talked of in connexion with the electrolysis of fibroids, there does not appear to be any real reason for fixing our limit of safety at less than 500 milliampères.

The next question is how best to modify this maximum so that we may use little or much of it at will. For this purpose, if the current supplied be the continuous one, an adjustable rheostat is all we require, provided we keep a milliampère meter, or at least some current measurer, in circuit. Such rheostat ought to possess quite 50,000 ohms resistance, working down by steps not exceeding 1000 at a time to zero. The objection to such an arrangement is that in the event of the electro-motive force in the mains rising suddenly from some disturbing cause, the safety-fuse may act and (automatically cutting off the current) give a more or less violent shock to any patient under treatment at the time. Further, that if, as sometimes happens, the fuse is somewhat sluggish in its action, a current considerably in excess of that intended may pass through the patient for the instant previous to the automatic breaking of the circuit. In a well-regulated current supply, such as that now provided by our English electric light companies, the risk of accidents of this nature is very small. Still it is well to bear in mind that in using a current from an electric light main we must be prepared against an unexpected and undesirable *increase* of power, instead of the unexpected, undesirable, and vexatious *decrease* of power which frequently accompanies battery currents.

Since commencing this article I have been informed that an instrument has been devised, and will shortly appear, which provides for the utilisation of continuous current installations for galvanisation, faradisation, electrolysis, &c., and which affords perfect protection in the use of such currents, being so arranged that it is impossible for more than the maximum current to which the instrument is set to pass to the patient. The maker supplies me with the following particulars. The instrument contains two switches for turning on the continuous or the faradaic current. Either of the two has to pass through a 16 or 32 candle lamp to prevent (in case of short circuit) the destruction of galvanometer, coil, &c. The current strength is graduated by means of four graphite and one metal rheostat. The latter contains altogether 1000 ohms on 28 subdivisions; the former contains 1000, 10,000, 50,000, and 100,000 ohms respectively, which can be varied *without any shocks*. All the other connexions—current reverser, De Watteville's key, &c.—are exactly as in the combined batteries by the same maker.

In dealing with alternating currents from dynamo circuits, the necessary modification for therapeutic uses can be easily made by means of a "transformer." The function of a transformer is of course to "transform"—i.e., to alter the relative values of electro-motive force and current strength as supplied by the mains; and the special use of the medical transformer is not only to render high potential currents safe by "transforming down," but also (by means of the Du Bois Raymond sedge arrangement) to secure the necessary regulation of current strength. One advantage of such transformers is that the current obtained from the secondary circuit, which is that used for therapeutic purposes, does not come direct from the main, and therefore the risk of "shock" to the patient is reduced. It is, however, as necessary that a safety-fuse, or some automatic "cut out," form part of the circuit with alternating as it is with continuous current. A special transformer for alternating current (by the same maker as the continuous current arrangement already referred to) was recently described in THE LANCET. It acts as a reversed induction coil—i.e., a weak intermittent current of high electro-motive force,—passes through the primary coil, which is wound with many turns of fine wire, and induces strong currents of low electro-motive force in the secondary coil wound with a few turns of thick wire. The instrument seems to work very satisfactorily, and I can personally testify to the regular, even, and pleasant character of the current obtained by its use when attached to a lamp lead upon the Grosvenor Gallery Circuit in London.

In this connexion it may not be out of place to remark that the quality of a current produced by galvanic induction in the secondary coil is not *quite* of the same quality as that obtained from an alternating dynamo, the former being of a sharper and more accentuated order, in addition to which, in the best of coils, irregularity of vibration is a very frequent occurrence. The dynamo current is comparatively smooth and wavy, the alternations being "demarcated" by a neutral point smoothly and rapidly passed, rather than by an interval. A "curve of sines" represents it. In the following diagram the sine curve is shown as well as the pointed character of a coil's alternations.



The outcome of our inquiry, therefore, seems to be this: that whilst it is clear that electric light circuits cannot be used for medical purposes without the strictest measures of precaution against the influx of strong currents, there is also good reason to suppose that efficient protection can be secured by the adoption of the above-indicated or other suitable methods.

Brighton.

HER MAJESTY THE QUEEN has been graciously pleased to accept a copy of Gertrude and Ethel Armitage Southam's book entitled "Hors de Combat, or Three Weeks in a Hospital," recently published by Messrs. Cassell and Company.

SOCIETY OF APOTHECARIES OF LONDON.—The results of the examination in Arts qualifying for registration as medical student, held in the hall of the Society on the 4th and 5th inst., have just been published. There were 287 candidates, and from the Pass-list it appears that 4 were placed in the First Class, and 23 in the Second Class, and 214 were certified as having passed in some subjects, but not in all. The next examination will be held on March 4th and 5th, 1892. In future candidates will be required to pass all the subjects at one examination, and failure in one subject will involve re-examination in all.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

THE SWALLOWING OF A JUBILEE HALF-CROWN BROOCH BY A CHILD OF TEN MONTHS; RECOVERY.

By J. C. PEARSON, M.D. ABERD.

THE particulars of the following case will, I am sure, interest a number of your readers, showing as they do the extent to which the gullet, even in an infant, can adapt itself to the body swallowed.

Mrs. B—— came to my house one afternoon about a couple of months ago in a very excited condition with her baby, stating that the latter had swallowed a jubilee half-crown brooch belonging to her maid. "I am certain it is swallowed," she added, in answer to my incredulous look. The child's face was swollen and flushed, and from its continual screaming appeared to be in great pain. Examination with the finger in the larynx, the gullet, and posterior nares revealed nothing. There was present, however, a copious discharge from the mouth of glairy mucus tinged with blood. The child vomited frequently, and was throwing herself about incessantly. Immediately after examining with the finger, which took less time than it does to describe, I inverted the child, holding it by the feet for some seconds, shaking and slapping its back. An examination of the mouth and passages as far as the finger could reach revealed, as before, nothing except a tumefied condition of the part. I recommended the mother to take her home and undress her, and I would follow. On my visit immediately afterwards, I examined the child externally as well as its restless condition permitted, but could feel no trace of the missing brooch. I again inserted my finger carefully and deliberately, exploring behind the soft palate, the larynx, and gullet, reaching down as far as the finger could go. I was thoroughly satisfied that the brooch was nowhere within reach, and withdrew my finger just as spasm of the glottis was coming on. I had no sooner done so when a severe attack of straining and vomiting supervened, in which the brooch, followed by its pin, came shooting out like a miniature comet.

I learned from the mother that the baby had unhooked the brooch from the maid's neck, and carried it to its mouth before the maid observed the action. What took place then is a matter of conjecture. The maid, it appears, lost all presence of mind, and screamed in alarm as she saw the child choking. The mother then came quickly on the scene, snatched up the child, and brought it to me. From what was described I am of opinion that the body got fixed behind the larynx sufficiently long to almost cause choking, and it was simply the timely act of seizing the child and rushing out into the open with it that relieved the breathing. The trinket must have passed down the gullet, brooch first, got turned round in the stomach, and was ejected brooch first, followed by the pin, with which it was connected by a hinge.

SUICIDE FROM RAT POISON.

By DANIEL MOWAT, M.D.

THE following case is interesting on account of the comparative infrequency with which this poison (phosphorus) is swallowed from suicidal motives.

Ann M——, aged thirty-five, on Saturday, Nov. 7th, while under the influence of alcohol, purchased from a chemist a small jar of rat poison, the contents of which she swallowed in spoonfuls. Within half-an-hour she was seized with severe sickness and pain in the epigastrium. On the following day, as she seemed to be in severe pain, the husband wished to send for a medical man, but his wife would not consent to see one.

I saw her for the first time on Tuesday, Nov. 10th. She

seemed very depressed, complained of pain in the abdomen, especially in the epigastrium, and was suffering from jaundice. She had a mitral systolic murmur, and the heart-sounds were feeble. Her liver was enlarged and tender, and her tongue furred. She gave me the following history. For some years she had been subject to epileptic fits, and on Wednesday, Nov. 4th, had had eleven distinct fits. Since then she had been getting worse, but did not send for advice sooner, as she had suffered from similar attacks previously. (Nothing was said regarding her having taken poison, and after her death I found that she had never suffered from jaundice.) I diagnosed jaundice, due probably to gall-stones or to an irritant taken as food. Hot fomentations were ordered to be applied to the abdomen, milk diet to be taken, and podophyllin and taraxacum, with dilute nitro-hydrochloric acid, given. She died on the following day, having lived four days and a half from the date of taking the poison.

No post-mortem examination being ordered by the coroner, I received permission to make a partial one. The body was well developed. On opening the abdomen there was a distinct garlic-like odour. The heart was fatty, and cavities empty. Posterior surfaces of lungs œdematous, and petechiæ scattered over these surfaces. The stomach was filled with a dark-brownish fluid having the smell of lucifer matches. The mucous membrane of the cardiac end was of normal appearance, but that of the pyloric end was deeply injected, and of a deep crimson colour. The transition in colour between the two halves of the stomach was sudden. No ulceration present; no peritonitis. Intestines empty and normal in appearance, except at the upper end of the duodenum. The liver was enlarged, fatty, and very friable. Uterus fatty, and membrane similar in colour to that of the pyloric end of the stomach. The bladder contained urine. The kidneys were slightly fatty.

The above is another instance of the ease with which one can obtain the most dangerous poisons for the purpose of taking away life, and though the deceased was in a state of semi-intoxication when she purchased the poison, she had no difficulty in obtaining it.

Stamford-hill, N.

CHROMIC ACID IN THE TREATMENT OF CYSTS.

By W. R. H. STEWART, F.R.C.S. EDIN. &c.

WITHIN the last few months I have treated with chromic acid three cases of ranula and seven of cystic goitre with such satisfactory results that I venture to make them known.

The three cases of ranula occurred in two males and one female: the former had received previous treatment without any benefit; the latter had not sought advice before. All three had large cysts, and the mode of treatment followed was the same in each. A portion of the cyst was cut away, and the contents washed out. A saturated solution of chromic acid was then freely applied with a chromic acid carrier to several points of the cyst wall. At the end of the week, the cavity having much diminished, the acid was again applied, and in from a fortnight to three weeks the wound had healed and all signs of the tumour had disappeared. There were no bad symptoms.

The seven cases of cystic goitre were in females. The tumours were tapped in the usual manner and the contents washed out. After all hæmorrhage had ceased, the saturated chromic acid solution was applied with a carrier through the cannula to the walls of the cyst, in the same manner as with the ranulas. Six of the seven cases healed rapidly after from two to three applications, but the seventh and second of the series resisted for a long time all attempts, and it was not until three months had passed and some half-a-dozen applications had been made that the tumour disappeared. But neither in this nor in any of the other cases was there a bad symptom, and I attribute the length of time the last-mentioned case took to heal to the fact that there was a considerable amount of hæmorrhagic oozing, which to a certain extent neutralised the action of the acid. It is therefore advisable to see that hæmorrhage is, as much as possible, arrested before applying the acid.

I cannot too strongly recommend this mode of treatment (first suggested by Dr. Woakes in THE LANCET about two years ago), and though the evidence I have been able to offer is not very great—ten cases in all,—still the persistent favourable results obtained are, I think, strongly in favour of a good trial being given to it, not only in the same class of cases as those I have quoted, but in every case of cyst that it is unadvisable or impossible to remove. In cystic goitres it seems entirely to do away with the most dangerous part of the ordinary treatment—viz., the conversion of the cyst into a large abscess.

Devonshire-street, W.

MATERNAL IMPRESSIONS.

By ARCHIBALD MACKAY, M.D.

I HAVE read with much interest the remarks on Dr. Lee's cases of maternal impressions in THE LANCET of the 21st ult. As I have met in my practice with several cases in which marks on the child have been ascribed by the mother to fright or other causes experienced during pregnancy, the following notes may be of interest.

The first case which came under my observation was that of a young girl with an oblong patch of soft dark hair on the left cheek, extending from the ear downwards to the neck. The mother stated that while pregnant she was working in the field at haymaking, when her husband threw a young hare, which he had found in the hay, at her, striking her on the cheek and neck in the exact place where the patch of hair was found on the child at birth. The colour and character of the hair on the patch closely resembled the fur of a very young hare.

The second case was that of a lady who, on entering her kitchen when pregnant, found the servant with a paraffin lamp on fire. She happened to place her hand on the back of her neck at the moment, and turned away immediately lest the shock might induce a miscarriage. The child (a male) was born at full time, and when examined had a red discolouration of the skin on the back of the neck, extending upwards towards the occiput, in pointed tips, not unlike a flame in shape and appearance.

The third case was also a male child. The mother, immediately after the child was dressed, inquired if he had any marks. I asked her to tell me what kind of mark she expected, and where I was to look for it. She replied, "Look on the top of the head for a mouse mark." When the head was examined, a brown oval patch was found on the spot indicated. The mother in this case did not see the child, and the mark was not observed until she had made inquiry about it. It seems that when pregnant, on opening a press, a mouse jumped out at her feet, causing a sudden shock, and she involuntarily placed her hand on the top of her head in the exact spot where the patch was found on the child.

The fourth case, a male child, when born had a raised bluish mark on the mucous membrane of the lower lip. The mother said she could only account for it by her having great sympathy with a friend who was in bad health at the time she was pregnant, and who had a venous nævus on the lower lip in the same place as on the child's lip.

The fifth case was that of a female child with a circular pinkish mark on the left arm above the elbow. The mother ascribed the cause to ungratified desire. When walking past a gentleman's grounds she saw a flowering rhododendron which she stood to admire, and happened to catch her left arm above the elbow with the right hand, being about five months pregnant at the time, and to this cause she attributed the mark on the child.

In these cases the first three were attributed to sudden fright, the part touched at the moment the shock was received being the part affected in the child, the fourth to sympathy, and the fifth to a wish ungratified. The exact period of gestation at which the impressions were received I have not been able to find out, but, as far as could be ascertained, it was between the fourth and sixth month. The mothers in all these cases were strong and healthy, and the infants well developed and born at full time.

Port Appin, N.B.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, ℸ b. iv. Proœmium.

WEST LONDON HOSPITAL.

A CASE OF ACUTE DILATATION OF THE STOMACH.

(Under the care of DR. DONALD W. C. HOOD.)

CASES of acute dilatation of the stomach being rarely met with in our wards, the following case is placed on record as a good example of the disease. In many particulars it resembles one reported at length by Mr. Henry Morris in the thirty-fourth volume of the Transactions of the Pathological Society. It differs, as does Mr. Morris's case, in which death ensued within forty hours after the occurrence of vomiting, from the two reported by Fagge[1] in the extreme acuteness and rapidity of onset of the symptoms. In Dr. Hood's case death occurred within twelve hours of the initial vomit; in fact, thirty-six hours before death there was no symptom calling for anxiety. When the vomited fluid was first seen by Dr. Hood, he thought the patient must have taken poison; but a careful examination of the vomit, which appeared to be a weak acidulated fluid mixed with a small quantity of blood, added to the fact that the girl had been under constant supervision, placed such a supposition out of the question. The state of heart, lung, and alveolar abscess seems to point to a condition of acute septicæmia with paralysis of the stomach.

L. C——, a young girl aged nineteen, was admitted into the West London Hospital on the evening of Dec. 24th, 1890. From an account given by her friends, the patient appeared to have been wanting in colour, but beyond this was considered to have had good general health, and up to within a few hours of admission had been in active work as a domestic servant. No complaint of illness had been made before the morning of the day of admission; she then spoke of a sore throat or face, with some difficulty of breathing. A medical man who was called in advised her being sent to the hospital.

On admission the patient was noted as being a well-nourished, rather delicate, anæmic-looking girl. She was evidently suffering from local inflammatory mischief, apparently connected with the right lower jaw. There was much constitutional disturbance, and the right lower part of her face was swollen and painful. The mouth could only be opened with difficulty, and the soft parts were swollen and œdematous, so much so that respiration was seriously impeded, and tracheotomy was at one time contemplated.

Dec. 26th.—The urgent symptoms terminated this morning with a discharge of pus from the mouth, after which the patient expressed herself as feeling comfortable. Respiration is now carried on without difficulty.

27th.—There is nothing in the patient's condition to excite alarm. She states that she has felt much relief since the discharge of pus.

28th.—Complains this morning of pain over the right chest. The pulse is very feeble and rapid; temperature 101·5°. Fine crepitation (pneumonic) to be heard over right lung.

29th.—Looking very ill. There is so much weakness and prostration that any careful examination is impossible. At 9 A.M. the patient began to vomit a thin watery fluid of light greenish colour without odour. Subsequently the fluid became dark, of inky colour, and remained so till death. The vomiting continued with scarcely any intermission till 7.45 P.M., at which hour the patient died suddenly.

Necropsy.—On opening the abdomen the stomach was seen to be greatly distended, reaching below the umbilicus, and extending far into the lumbar regions of each side. It contained about two quarts of dark fluid of the same character as that vomited during life. The duodenum and upper few inches of jejunum were also dilated. No erosion or breach of surface could be discovered in either stomach or bowel. In addition to this extreme dilatation of stomach there was acute purulent pericarditis, and both lungs were in a state of engorgement. To the naked eye the stomach appeared like a thin translucent membranous sac, in some places stretched to the thickness of writing-paper. A section prepared for microscopical examination was unfortunately mislaid and lost.

[1] Guy's Hospital Reports, series 3, vol. xviii.

HALIFAX INFIRMARY.

CASE OF IMPERFORATE ANUS WITH HYPERTROPHIED AND DILATED RECTUM.

(Under the care of Mr. HODGSON WRIGHT.)

ALTHOUGH the condition illustrated by this case is a most serious one, it is less so than many of the other forms of malformation of the rectum. The effect of the long-continued obstruction is shown in the condition of the large intestine; this excessive distension has not infrequently been the cause of death. Le Fort has recorded one case and Ricord another which resemble this very closely, for in both the rectum opened into the vaginal wall, and there appears to have been no suspicion of the abnormal state of the patient. In the case recorded by Le Fort, the woman had had three children, and the medical man who attended her had no knowledge of the existence of the abnormality. It will be well to compare this case with the one which we published in THE LANCET of last week, in which obstruction had been present about six years. For the notes of the case we are indebted to Mr. John F. Woodyatt, senior house surgeon.

M. W——, a married woman aged twenty-five, was admitted into the Halifax Infirmary on March 9th, 1890, suffering from severe burn of the face, chest, and arms. She died eleven days after admission from sapræmia. The imperforate anus was only found out a short time before death, when the nurse had occasion to give the patient a suppository. The condition of the bowels is worthy of note. The patient did not have a motion till five days after admission, when the bowels were moved eight times. On the eighth day she had two motions; on the ninth a sharp attack of diarrhœa set in, which continued till the patient died. She had no family, and the husband said he was not aware of her condition.

Necropsy.—Body well nourished; abdomen not over-distended; sloughs not yet separated. Where the anus ought to be there was a small nipple of redundant skin. The mons and labia were well developed, but the urethra opened into the vagina about half an inch above the caruncule, and not into the vestibule. On passing the fore-finger into the vagina, the os could be felt in the normal situation. There was an opening in the posterior vaginal wall midway between the os and the external parts, through which the finger could be passed quite easily into the rectum. On slitting up the abdomen the rectum was found immensely hypertrophied and distended, and filling up the whole of the front of the abdominal cavity as high as the transverse colon. The bladder was small, contracted, and could be felt behind the pubes. The uterus projected slightly above the pelvic brim, and was bicornuate, but not enlarged. The rectum was covered by peritoneum in front and on both sides, but not behind, except at the upper end, where it had a mesentery, and was continuous with the sigmoid flexure of the colon. It was three-eighths of an inch thick, and, on microscopic examination, presented the same structure as the normal rectum. The muscular coat was greatly hypertrophied, and the fibres were very red and fleshy. The sphincter, which closed the rectum from the vagina, was a powerful one, and continuous with the circular muscular fibres of the bowel. The sigmoid flexure was drawn up by the rectum, and divided from it by a constriction.

Remarks.—Although imperforate anus is not an uncommon condition, cases where the rectum opens into the vagina at birth are much more rare. The case is principally interesting, however, on account of the hypertrophied and distended state of the rectum without any obstruction, and the only way to account for this condition is that, to avoid the inconvenience of the passage of fæces through the vagina, the patient postponed the act of defecation for several days, till an immense amount of matter collected, and when

unable to retain it any longer expelled the contents of the rectum by violent muscular efforts. This was what took place in the hospital, till the patient was so ill that she lost control, and diarrhœa was the result. The patient said that when she was well she regularly went several days before the bowels were moved, and then had diarrhœa, to be again followed by constipation. An organ in this state must have a great amount of work to do, and, without any evidence of obstruction, gradual distension, followed by violent contractions, must be considered to be the true explanation of the condition.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Xanthoma Diabeticorum.—Subdural Hæmorrhage.—Leprosy.

AN ordinary meeting of this Society was held on Dec. 15th, the President, Sir George Humphry, in the chair.

Mr. MALCOLM MORRIS and Mr. CLARKE showed a case of Xanthoma Diabeticorum, which was the eleventh case that had been recorded. The patient was a man aged twenty-seven, whose mother had suffered from functional glycosuria. He had always been stout, and had not suffered from jaundice or headache. It was ascertained that a year ago there was no sugar in his urine. In July some rough spots appeared on the backs of his elbows, and later on the extensor surfaces of the limbs; under arsenic they gradually disappeared. By the middle of September the rash had returned more extensively, and in November it was very severe, affecting especially the elbows and the gluteal region, and a few papules appeared on the trunk. The rash consisted of papules and tubercles of various sizes, which were for the most part discrete; they gradually became red and ultimately yellow in the centre, with a red periphery. The urine was found to contain nearly 7 per cent. of sugar. Anti-diabetic treatment caused a gradual disappearance of the eruption, though the patient suffered much from irritation of the skin while the rash was fading. Dr. Robinson of New York had described a precisely similar condition.—Mr. Clarke described the macroscopic and microscopic appearance of the lesions in a small piece of skin excised from the outer border of the forearm. The yellow nodules were situated in the deeper part of the corium; the majority were in close relation with one or more hair follicles, but this did not apply to all. Fresh sections showed the nodules to be occupied chiefly by drops of fat. Around the smaller vessels was a good deal of small-celled infiltration, and at some distance from the capillaries the extravasated cells were large and of yellow colour, being difficult to stain; they were chiefly occupied by fat. There was evidence that some of this fat passed out of the body by way of the epidermis. The lymphatics around the nodules were also full of fat. The hair follicles and the sweat glands were only affected by fatty degeneration where they were involved in the older nodules. The nerves in the neighbourhood of the nodules were normal. The connective tissue and even the elastic fibres in the neighbourhood of the large cells could be seen undergoing fatty degeneration and disintegration. A search for micro-organisms resulted negatively. They reviewed the literature of the disease, and concluded that the disease was essentially of the same nature as the other varieties of xanthoma. Though xanthoma planum of the eyelids presented clinically a marked contrast to these cases, yet links were found by which the two affections were brought into close relationship. Having enumerated some of the points of distinction between the two, they summed up the anatomical characters of xanthoma diabeticorum by describing it as a chronic deep dermatitis with early fatty degeneration.

Dr. E. T. WYNNE showed and described a series of specimens which illustrated the origin of the cysts in Pachymeningitis Hæmorrhagica, from their commencement as small hæmorrhages from the pia mater to their final termination as an organised membrane—"arachnoid cyst." In no specimen was there any evidence of inflammation of the dura mater. The specimens illustrated his remarks. The first and second showed the earliest condition, with little specks of blood in the dura mater; the third showed a more extensive extravasation; the fourth, fifth, and sixth were well-developed specimens of pachymeningitis hæmorrhagica in the later stages; while in the last specimen the blood was entirely absorbed, there being nothing but a colourless film split into two layers—a so-called "arachnoid cyst." He held that his exhibit demonstrated clearly the hæmorrhagic origin of these cases.

Dr. HERBERT LARDER showed the organs from a case of Leprosy, and gave the following account. The patient, a young man nineteen years of age, was born in Barbadoes. As a child he used to play much with a leprous beggar, and when he was six years old some smooth, livid spots were noticed on his body. When eight years old he was sent to England, and during the last eleven years he had been constantly under observation in University College Hospital, in the London Hospital, and in the Whitechapel Infirmary, having been an inmate of the last-named institution since 1885. On admission there he was covered with numerous sores, but recovered to a great extent, only a few sores being left on the head, face, hands, and feet. The good effects, Dr. Larder was certain, could be attributed to the employment of chaulmoogra oil. The patient was able to get up and even to go out in warm weather until six months before his death, when an apical pulmonary affection declared itself with a constant cough, and he died with diarrhœa from exhaustion. The face showed very clearly the ordinary appearances of tubercular leprosy, and the limbs also. There was, however, but little deposit or ulceration on the surface of the trunk. There was a small patch of anæsthesia on the chest, and towards the end of life there was very great contraction and scarring of the lips, mouth, and larynx. At the post-mortem examination there was very marked recession of the tubercles of the face; the bronchial glands were enlarged, hard, and matted together; the lungs were infiltrated with nodular deposit, indistinguishable by the naked eye from tubercle, and the upper lobes were firmly adherent to the chest wall. The upper and middle lobes of the right lung had broken down into several small cavities, and so had both lobes of the left lung. The spleen and liver were enlarged; the genital organs were small and undeveloped; the ulnar and median nerves on both sides were much thickened, and of a brown colour below the middle of each forearm, and the peritoneal nerves were found to be in a similar condition, though to a less marked extent. Dr. Larder exhibited photographs of this patient, as well as of a case of anæsthetic leprosy, on a screen.—Dr. THIN described the appearances of leprosy bacilli from photographs thrown on a screen, and compared them with those of tubercle bacilli. He had found it impossible to separate them by microscopical examination, but he thought that the photograph of the bacilli when highly magnified showed some slight differences. He then referred to the organs of the case under discussion, and especially to the lungs, lymphatic glands, and testes; but he was unable to say whether the changes in the lung were tubercular or leprous. He stated that the photographs had been prepared by Mr. A. Pringle and the sections by Dr. Henderson.—Dr. PHINEAS ABRAHAM described sections taken from various organs and parts of the body of Dr. Larder's case. He stated that the spleen and the kidneys, though they showed no naked-eye changes other than enlargement in the case of the spleen, were found to contain numerous bacilli. The changes in the lungs he considered to be due to tubercle bacilli.—Dr. RADCLIFFE CROCKER spoke of the early clinical history of the case. He showed a photograph of the boy when he first came to this country, and a second two years before his death. He said that though the disease might be at first either of the anæsthetic or of the tubercular type, towards the end it was usual for both conditions to be found in coalescence.—Dr. BEAVAN RAKE considered that the chief point of interest was the condition of the lungs in these cases. He had paid much attention to the subject, but had found great difficulty in saying whether it was due to the presence of tubercle or of leprosy bacilli. The latter were found to differ in size according to the part of the world from which they came; thus the Spanish variety were larger than the Norwegian. Out of 109 necropsies on lepers which he had made in seven years, in 30 per cent. he had found what he would call "tuberculosis" in one or more of the viscera. From the records of the General Hospital of the Port of Spain, Trinidad, 18·46 per cent. of the deaths were due to tuberculosis, and this showed that the

proportion was greater amongst the lepers. In five cases of tubercular leprosy and in two of mixed leprosy he had noticed absorption of the cutaneous tubercles coincided with visceral infection, and he quoted a case to illustrate this. Cultivations both in fowls and in artificial media had in his hands been uniformly unsuccessful. In anæsthetic leprosy bacilli were rare in the viscera, but in the tuberculated form they were common. The evidence which he had collected led him to the conclusion that the visceral lesions were produced by the bacillus of leprosy, and not by that of tubercle. He stated that Gerlach held that the primary lesion in both the anæsthetic and nodular forms was by way of the skin. In the anæsthetic form the bacilli then travelled up the nerve trunks, whereas in the tuberculated form the germs remained in the skin and developed there.—Dr. WYNNE asked Dr. Thin if he still believed that bacilli were found in the epidermis. He was of opinion that the change in the lungs was due to tubercle.—Dr. THIN replied that he had often found bacilli in the deeper layers of the epidermis.—Dr. ABRAHAM had also, though rarely, found bacilli in the epidermis. The bones examined showed an expansive caries, and osteoclasts were found eating away the laminæ; there was no ulceration.—Dr. LARDER, in reply, said that the enlargement of the median and ulnar nerves was not noticed during life. The chaulmoogra oil was administered in capsules in ten-drop doses, and also rubbed in externally; the improvement caused by it was very rapid.

The following card specimens were shown:—

Dr. E. T. WYNNE: (1) Diphtheritic Dysentery; (2) Polypi of Colon.

Mr. J. H. TARGETT: (1) Substernal Goitre; (2) Sarcoma of Kidney extending by Ureter into Bladder.

Dr. G. B. M. WHITE: Mamma with a Carcinomatous and two Adenomatous Growths in its Substance.

CLINICAL SOCIETY OF LONDON.

Mycosis Fungoides—Case of Epilepsy, in which eighty-six needles were extracted from the body.—Rapid Heart.

AN ordinary meeting of this Society was held on Dec. 11th, Sir Dyce Duckworth, President, in the chair.

Dr. SAVILL and Dr. RISIEN RUSSELL exhibited some patients from Paddington Infirmary affected with a form of epidemic skin disease. Microscopical sections were also shown, and diplococci from the vesicles and tissues.

Dr. PYE-SMITH related a case of Mycosis Fungoides, with a secondary granulomatous growth in one adrenal body. The patient, a large, heavy man of sixty-six, was admitted Jan. 17th, 1891, into Guy's Hospital, with a dry, irritable eruption affecting much of the head, neck, and limbs, but leaving large tracts of skin unaffected—a chronic, dry eczema with much thickening, answering to Wilson's eczema hypertrophicum. This had been gradually spreading since it began on the face and scalp in the spring of 1890. The eruption had often got better under treatment, and then spread again. Sore places, which he attributed to rubbing and scratching, appeared on the shoulder, back, and eyelid. On admission he was free from fever, and the lungs, heart, and urine were normal. Raised granulating patches were present on one eyelid, over one scapula, and on the loin, and there were lacerations covered with scabs on one shoulder and on one leg below the knee. A slough had already formed in one of the former, and after its discharge the wound healed with a sound scar. The granulating growth on the right lumbar region, however, grew much larger, and the patient's temperature rose. Towards the end of February his strength and appetite began to fail. By March 6th several of the more superficial sores had healed, and the large lumbar growth had increased to a circumference of sixteen inches and a height of an inch and a half. An injection of chromic acid failed to hasten the process of sloughing, and the original granulating surface on the eyelid assumed the same hypertrophic character. A large amount of clear serum poured from the granulating masses. On March 20th muttering delirium set in, and death followed on the 30th. At the necropsy the liver was cirrhotic, and the base of one lung in a state of recent hepatisation. The other internal organs were normal, except the left adrenal body, which was converted into a firm tumour weighing 4½ oz. This proved to be a round-celled sarcoma-like growth, and sections of the tumours of the skin showed a similar structure in some parts, although in others the size and arrangement of the cells and stroma were those of granulation tissue.—The PRESIDENT said that this was the second instance of the disease shown during the session. He asked for further particulars concerning the histological characters of the growths.—Dr. PYE-SMITH said the structure of both the primary and secondary growths appeared to him precisely like what Virchow had described as granuloma. In some sections the cells seemed to be larger than leucocytes, more regularly arranged, and with rather more intercellular substance; this had led some of those pathologists who had examined the specimens to regard them as sarcoma. Micro-organisms had been carefully looked for, but in vain, and cultivations of serum also yielded negative results.

Dr. BASTIAN gave the clinical history of a case of Epilepsy in which eighty-six needles had been extracted from different parts of the body. In the early part of this year he received from Dr. Merryweather of Guisborough eighty-six needles and one pin, which had been removed from the body of a woman now an inmate of the workhouse there. Fourteen others were still to be felt in different parts of the left side of the body. Of these needles, seven were very large, ranging from 3¾ in. to 3⅞ in. in length. The patient was now aged fifty-five, and had been subject to fits from early childhood. She was admitted into Guisborough Workhouse in 1886. She sometimes had several fits in one day, and rarely passed a day without having one. She recovered quickly from the attacks, and nothing like a post-epileptic automatic state had ever been recognised. She was described as fairly intelligent, but as having fits of bad temper, in which she refused to do anything except knitting, and would not take her food. She had no morbid appetites, and her conduct towards others had been on the whole satisfactory since her admission. Needles were first noticed in her body after she had been in the workhouse about twelve months, during which time she had been accustomed to do much sewing, and often had packets of needles in her possession. The needles had all been extracted by the doctor, the nurse, or the matron, or else by the patient in the presence of one of them. With the exception of one needle expelled from the mouth during a fit of coughing, all had been extracted from some part of the left side of the body, principally from the hypochondriac, lumbar, and iliac regions, or from the buttock and the thigh. No abscesses had occurred in connexion with the presence or passage of any of the needles, nor had wounds of vessels or great nerves ever been produced. The patient was not distinctly hemianæsthetic, though there did seem to be some blunting of sensibility on the left side of the body. She had never been seen passing needles into her body, nor would she make any definite statements on the subject. She had complained very little of pain from the presence of needles in her body, but of some irritation and tenderness when they were approaching the skin and were about to emerge. The needles then caused some slight inflammatory redness, and often some induration of the tissues immediately around them, but no suppuration. The sites from which needles had been extracted were indicated by small white scars. This strange needle-cushion like patient had apparently nothing to gain by thus torturing herself in so extraordinary a manner.—Dr. MACLAGAN said the peculiarity of the case lay in the number of needles which had been found. A year ago he was called to see a governess with pain in the knee-joint. Eight needles were found in the neighbourhood of the articulation. The patient had no object in doing it.—Dr. GLOVER asked if the case were one of hysteria or epilepsy. It appeared to him that the epileptiform nature of the case had not been conclusively proved, for the tongue had not been bitten, nor had the mind suffered.—Dr. BASTIAN, in reply, said there was no doubt that the case was one of *bonâ fide* epilepsy. The fits had begun in childhood, came on without warning and very suddenly, and she became quite rigid. It was not necessary for the tongue to be bitten to establish the fact that epilepsy was present. He could not tell if hysteria had been grafted on to the case. He thought there was good evidence that the mind was affected. The interest of the case lay in the fact that so many needles had been inserted, and that no accident had attended their introduction or passage.

Dr. F. O. BUCKLAND read a paper on a case of **Rapid Heart.**

The patient was a girl aged eleven, who had been subject to palpitation, giddiness, and shortness of breath on slight exertion for five or six years. On the first examination in January, 1890, disorder of rhythm was found, but nothing suggesting any organic change in the heart could be detected. On March 27th she developed measles, which took a usual course till April 2nd, upon which day the heart suddenly began to beat at the rate of 215 per minute. After the lapse of seven or eight hours this excessive rapidity had ceased, and an irregular, fairly full, and compressible pulse of 80 was counted at the wrist. The temperature at the time was 101·4°. On April 15th the heart again suddenly began to beat with abnormal speed, and continued to do so for ten consecutive days—i.e., till April 25th, the number of cardiac cycles ranging between 210 and 216 per minute. The chart showed a zigzag temperature between 98·6 and 103 during the first eight days of this attack, while during the last two days no fever was recorded. The impulse remained forcible throughout, there was no increase in the area of dulness, and no murmur was noted; respiration 27 per minute, somewhat shallow, but without dyspnœa. Pain was absent, but during the first four days considerable discomfort and interrupted sleep were complained of; this, however, passed off, so that during the latter half of the attack the patient seemed to be quite unconscious of the heart disturbance. Hyperæsthesia, tache cérébrale, and sluggish pupils were noticed. There was a distinct history of nerve derangement on the paternal side, the father being a general paralytic, and the grandmother insane. Subsequently, the pulse was sometimes regular and sometimes irregular. Treatment by means of stimulants and heart tonics was unsatisfactory. Blisters to the neck and the application of electricity (constant current) to the region of the pneumogastric in the neck were tried with negative result. Although this heart-riot seemed to be associated with measles, yet the fact of similar attacks of shorter duration having occurred when the child was apparently in good health, and the fact that the disturbance continued during the absence of pyrexia and ceased quite suddenly on both occasions, while evidence of endo- or myo-carditis or other structural change was wanting, appear to negative the proposition that the morbilli poison was the cause, and to render it impossible to assign any definite reason for its occurrence; so that the case might apparently be placed under that somewhat obscure and unsatisfactory term "neurosis."—The PRESIDENT said that cases like that which had been read had been brought prominently before the profession during the last ten years; very careful observations had been made, their life history obtained, and in some of those which had proved fatal the post-mortem records were available. He trusted that in due time the author would furnish the sequel to the case. The relation of measles to heart disease had been a moot question from time to time, and, though some maintained that endocarditis could be produced by the poison of measles, he had not seen an illustrative case.—Dr. MACLAGAN thought it fair to raise the question whether the measles poison had produced the cardiac disturbance in this case, or whether it were a manifestation of neurotic origin inherited from the grandfather and father. Such a condition of heart was not uncommonly found in whooping-cough; there it might probably be due to disturbance of the pneumogastric tract, and the measles poison might act in the same way. He thought the case neurotic in nature. Not long ago he saw a girl sixteen years of age with rapid cardiac action, associated with catamenial disturbance. An attack of asthma developed later; its onset was coincident with a cessation of the cardiac trouble.—Dr. BUCKLAND added that the mother had recently come under his care with extremely irregular cardiac action.—Dr. BENHAM asked if there was any exophthalmos or thyroid enlargement. The absence of one or even two of the trinity of symptoms in Graves' disease did not preclude a diagnosis of that affection being made.—Dr. PYE-SMITH said that probably instances of this disease had been met with by the older writers, but as they were not cognisant of the signs and symptoms of organic cardiac disease, they could not differentiate these from the functional cases. He did not think that all cases of rapid heart were to be explained by any single method of etiology; they were certainly not of rheumatic nature. As to its neurotic origin, that was an extremely vague expression. There must be something wrong with the innervation or with the contractile tissue, but physiologically it was evident that the fault might lie either in the intrinsic cardiac ganglia, the vagus, the sympathetic, the cerebral centres or the muscular fibres themselves. It had been shown experimentally that the muscle fibres could contract independently of nervous influence, and if they could go right without nerves he thought they could also go wrong. When these cases were first recognised, physicians were in the habit of regarding them as troublesome, though prognostically interesting, conditions. The condition was believed to affect hysterical women; it was regarded as functional, and it was thought that they got well. But the clinical interest did not end there, for it was found that some of the cases of tachycardia proved fatal, and at the necropsy nothing was found beyond hypertrophy. As for treatment, he had found that digitalis, which was so valuable for morbus cordis and ascites, was of no use at all; belladonna and strophanthus also were very disappointing. Absolute rest in bed for a long time together was the only thing that seemed to be of benefit. Graves' disease had no morbid anatomy, but as a disease was recognised as a group of symptoms, of which three were principal ones; when two of these were absent he did not see how it could be possibly recognised.—Dr. BRISTOWE, as one who had studied this condition of tachycardia very carefully, could see no relationship to exophthalmic goitre, the heart in the latter not being usually so rapid. The affection was not confined to women, for he had seen it in men of mature age. It was functional in men, in that there was not necessarily organic disease of the heart present. He related the case of a lad aged nineteen in whom the attack came on suddenly when eight years of age, during a paper chase. The attacks of palpitation which occurred from time to time were misunderstood. The pulse used to go up to 240 in the minute, and on one occasion it had reached 304, but the rapid action was unaccompanied by distress, and he was able to go backwards and forwards to his business. He died quite suddenly while seated at the piano. The heart was found to be large, but otherwise it appeared to be healthy. He knew of another case in a lady in which the disease was of sixteen or seventeen years' standing; she used to have attacks in which the pulse went up to 240 in the minute, and these would last for weeks at a time. During these periods, however, she was able to travel about and perform hard work. She ultimately died of dropsy. These cases were not very amenable to treatment, but he was not nearly so sceptical as many were of the benefit of digitalis, and he could refer to many cases in which, suitably administered, he had found it of great service. Arsenic in some cases was likewise very beneficial indeed.—Dr. PERCY KIDD said that the result of the discussion on the cases which Dr. West brought forward some little time ago was that organic disease was behind most of them; he did not think, however, that this conclusion was warranted by the facts. He referred to the case of a gouty woman seventy years of age who was under treatment for a mild glycosuria. Her pulse was 72 and regular, and there were no cardiac symptoms. One night after eating iced gooseberry fool her pulse went up to 200; she became collapsed, and was with difficulty restored. She had a succession of the attacks during the ensuing fortnight, and they proved fatal. Another case of extreme delirium of the heart was relieved by an ice-bag to the precordium. In a third instance the exciting cause was a violent mental shock, and the pulse was over 200 to the minute; the heart was enlarged, and the condition was at first relieved by digitalis and belladonna. Later the effect of these drugs passed off, and there being some suspicious ulceration of the leg some iodide of potassium was added to the mixture, with the result that the patient was at once relieved. The paroxysmal nature of these cases of tachycardia was in favour of a nervous rather than a myocardial origin. In Graves' disease the condition was different, for the quickening of the pulse was constant.—Dr. BUCKLAND, in reply, said that there was no exophthalmos, and the thyroid was normal. He found a difficulty in applying the term "paroxysmal" to a disease the attacks of which might last a fortnight.

MEDICAL SOCIETY OF LONDON.

Discussion on Influenza.

AN ordinary meeting of this Society was held on Dec. 14th, the President, Dr. Douglas Powell, in the chair.

The adjourned debate took place on the papers on

Influenza read before the Society on Nov. 2nd by Dr. Althaus and Dr. Savage.

The PRESIDENT, in opening the proceedings, said that the authors had indicated for discussion the following principal points:—On Dr. Althaus' paper: 1. Influenza was an infectious nervous fever caused by a special poison (grippo-toxine) circulating in the blood, and causing congestion of the medulla oblongata. 2. Perfect or imperfect recovery from the attack of influenza was owing to a sufficient or insufficient quantity of an antidote (anti-grippo-toxine) being formed in the serum of the patient. 3. Immunity once acquired might be lost again by the disappearance of anti-grippo-toxine from the serum. 4. Grippo-toxine resembled the syphilitic virus in its tendency to attack all parts of the nervous system after the attack was over, but surpassed the syphilitic toxine in virulence and rapidity of action. 5. The three varieties of influenza—nervous, catarrhal, and gastric—were not distinguished from one another by any pathological characters, but only by the localisation of grippo-toxine in different areas of the bulb. 6 The nervous form of grip was owing to congestion of the thermolytic, cardiac, and other centres in the bulb. 7. The catarrhal form of grip was owing to congestion of the nervous mechanisms formed by the nuclei of the fifth pair and the vago-accessory nerves in the bulb. 8. The gastric form of grip was owing to congestion of the vomiting centre in the bulb, the shock being sometimes transmitted to the splanchnic nerves, which anastomosed with the pneumogastric in the cœliac plexus. 9. There were afebrile cases of influenza, the principal symptom being intense mental depression, leading sometimes to suicide. 10. Until the anti grippo-toxine should have been isolated, revaccination with animal lymph appeared to be the best preventive of influenza. On Dr. Savage's paper: 1. Certain nervous symptoms, such as delirium, insomnia, and neuralgia, were common in influenza. 2. Similar symptoms in an exaggerated form might follow influenza at an indefinite period after the disorder. 3. True insanity rarely followed influenza, unless the patient were strongly predisposed to neuroses 4. Melancholia was the most common form of alienation, though every other form had been met with. 5. In certain conditions influenza set up general paralysis of the insane. Epileptiform attacks might follow influenza. 6. Influenzal neuroses were fairly curable.

Dr. SYMES THOMPSON desired to speak first of the paper which had been read by Dr. Savage. The statements of that author amounted together to a mass of evidence which led one irresistibly to the conclusion that these nerve defects could not be accidental. The evidence should satisfy us completely that the sequelæ were not only post-influenzal but propter-influenzal. He laid stress on the remarkable fact which Dr. Savage had adduced, that insanity in its acute phases had been removed by influenza. This was in accordance with what had been known to happen; that any great shock to the nervous system might check brain trouble. He had known a case in which symptoms of insanity were cured by a fall from a second storey window. Dr. Savage had truly remarked that cases of insanity following influenza had almost always a family history of nerve trouble. In the course of the day he had seen a case in which insanity previously existed, and in which, after influenza, a curious neurosis developed—namely, a herpes following the course of the fifth nerve. His father, the late Dr. Theophilus Thompson, had collected much historical evidence on the nervous side of this ailment. In the epidemic of 1836 and 1837 the indications of its connexion with nervous disease became clear. Graves probably was the first to point out, though Blackiston divided the honours with him, that the pulmonary affections were due to the removal of the nerve control from the lung—to a serious morbid influence on the vagus nerve. Again, in 1847, Dr. Peacock drew attention to the fact that lowered vitality of the nerve centres was one of the chief characteristics of influenza. They had evidently noticed the points which Dr. Althaus had emphasised. He considered that the cases of extreme dyspnœa in the early stages of the disease without manifest pulmonary signs pointed to lesion of the vagus nerve. He had seen two fatal instances from exposure to cold during the second week of the illness Those cases of tachycardia in which the heart ran up to 200 or more per minute, and in which recumbency was so essential on account of tendency to cardiac failure, also pointed to nerve lesion, and Dr. Ord's recent paper on the cardiac conditions associated with gastric symptoms was worthy of thought in this connexion. In influenza the gastric complications were of the nature of a crisis, and the attacks had something in common with sea-sickness, a desire to be left alone or to die being often expressed. As regarded the toxic agency of an assumed microbe, that was a point which this epidemic alone could have raised, on account of the comparatively recent birth of bacteriology. His father had assumed that there might be some connexion between the spread of the disease and the distribution of low forms of animal life. Dr. Althaus had referred to a grippo-toxine; the recent work regarding pneumo toxine and anti-pneumo-toxine was interesting in this connexion; but he doubted if our knowledge of these matters was yet sufficiently consolidated to bear the basing upon it of any large amount of speculation, and any analogous inferences must be regarded as possessing a large element of imagination. The hypotheses put forward were no doubt extremely interesting, but there was often a danger of regarding a mere hypothesis as something more. The suggestion of treatment by vaccination was valuable, but much further evidence was needed before we could feel sure that this measure would put a stop to the spread of the disease.

Dr. SANSOM said that many of the points which had been raised had a strong practical importance. He desired to refer especially to the resemblance of the influenzal virus to that of syphilis. It had not fallen to his lot to see a large number of cases of acute influenza, but he had seen many of the results of that disease, and at first he was much puzzled by some of them. A man was seized in the night with intense pain in the liver region, which he thought was colic. It lasted for an hour, and was extremely severe. He had previously been healthy. Next day an enema acted well, and there was no jaundice. The following night he had a similar attack, and the gall-bladder could be marked out by the area of tenderness. After this attacks occurred both by day and by night, and he got relief from opium and belladonna There had been an antecedent history of influenza twenty months before—a severe attack, accompanied by great prostration, but followed by a period of average health. A number of other cases presented this pain which he called "cirrhalgia." It was a severe epigastric pain, sometimes constant and sometimes intermittent. The time that these symptoms developed after the initial attack of influenza varied a great deal, from a few weeks to some months. About the same time he began to notice cases in which there were heart symptoms of great severity, like angina pectoris. An athletic man with no evidence of too high arterial tension, was suddenly taken with a screw-like pain at the heart which caused him to fall prone in a state of syncope; the fit was not an epileptoid one. In another case a patient without an anterior history of influenza became from a heart attack faint to absolute unconsciousness and afterwards had maniacal attacks. These he regarded as intense attacks of cardialgia, showing no sign of true angina, no high arterial tension, no diseased arteries, no signs of coronary failure. In some cases there was less pain, but there was evidence of perturbation of cardiac action, an extremely rapid or an extremely slow heart occurring as a remote effect. Some had a sense of impending death, without any great pain; he had not known such a case to eventuate fatally. In other cases pain in local nerves was extreme, especially in the calves. A child he had seen with complete motor paralysis of both legs, but it made a perfect recovery. These appeared to him to be instances of peripheral polyneuritis and quite like alcoholic neuritis. One patient had double supra-orbital neuralgia, another had violent right-sided infra-maxillary pain, both being subsequent to influenza. His conclusions were that these lesions which he had instanced were not general or due to influence on nerve centres (though in early influenza the lesion might be a central one), but that the evidence pointed to a local peripheral lesion. The hepatalgia, the cardialgia, and the local muscular pareses were to be explained in this way, and some cases were instances of pure local neuritis, like those produced by alcohol or by the toxines evolved under epidemic influences.

Dr. BEZLEY THORNE did not think that the incidence of the disease was central in its onset. He held that the fever and the initial symptoms were matters of little importance, but that after the invasion was over the nervous system became occupied by a poison which might remain for weeks or years. One salient feature of this occupation of the nervous system by poison was a prolonged congestion

of the vessels of the cerebro-spinal system. In early cases he had found that two-thirds of the females exhibited this spinal tenderness, while of the males one-third showed the same symptom; the disease, therefore, could not be limited in its incidence to the medulla oblongata. He had noticed radiating symptoms. If he percussed over the cervical vetebræ, pain was referred to the neck, and so on lower down the trunk. He held that every case should be treated as one of cerebro-spinal concussion, and kept in the recumbent position. He had known carriage exercise prematurely indulged in to produce neuritis, and he had observed loss of heart power or other symptom of cerebro-spinal meningitis to develop. Influenza was followed by a period of vital depression, which was one of great danger; the temperature might be markedly subnormal, and the condition of the patient so extremely weak, as to necessitate keeping them lying down. He held, therefore, that the use of the thermometer was of greater use in the later than in the earlier stages. He could not agree that the gastro-enteric symptoms were due to central causes; he thought that they were usually excited by local troubles, though central nervous weakness might predispose to them.

Dr. SISLEY, referring to Dr. Savage's assertion that the insane were less disposed to take influenza than the sane, said that he had found a similar immunity in gaols, and he attributed this to the fact that they were passing their lives away from the risk of contagion. He protested against influenza receiving any further new name. He asked what evidence there was for Dr. Althaus' assertion that there was congestion of the medulla oblongata, and he desired to be referred to a record of a necropsy on an early case which bore this out. Influenza differed from syphilis in that the latter affected the nervous system so much later. Again, in syphilis there were marked organic changes in the nervous system; could Dr. Althaus refer to similar observations in influenza? The nerve affections in influenza appeared to him to be more transitory, and therefore more in accord with those of diphtheria. In catarrhal cases he held it to be proved that there was a definite pathological change in the lungs: it was a broncho-pneumonia like that of children, and not like ordinary croupous pneumonia. The supposed protective influence of vaccination had been asserted, but it was not fair to compare a special community like soldiers with the general community for statistical purposes.

Dr. HERON had seen many cases of influenza, but he had observed very few complications. A man between forty and fifty had an attack of the ordinary kind. Shortly afterwards he was seized with depression and great languor, which led on to melancholia and a tendency to self-destruction, and the patient himself took some pains to avoid having at hand the means of suicide. This condition remained for four months, and then gradually cleared up. He asked if for practical purposes of treatment a melancholic ought not always to be regarded as a suicidal person. His friend Dr. Pringle had told him that in the asylum to which he was attached the attack was confined to the male side, and, in connexion with this, it was remarkable how the poison seemed to select certain rooms and parts of a house, and only to recur there in a second epidemic. This suggested the possible value of seizing the first cases and carefully isolating them.

Dr. GUTHRIE dwelt on the great resemblance between diphtheria and influenza. The poison in both seemed to have both irritant and depressant properties; in influenza the irritant and in diphtheria the depressant were the more prominent. In both the condition of slow pulse had been noticed, and in some cases of each it had led on to fatal results. In both tachycardia had developed, the cardiac crises of which might prove fatal. The condition of bradycardia in influenza he regarded as due to irritation of the cardio-inhibitory fibres of the vagus. The degree to which the pneumonia of influenza was fatal suggested that there was not only pulmonary inflammation, but paresis of the vagus also. He had noticed a great deal of secretion in some of the paralytic cases of diphtheria, which thus resembled the catarrhal cases of influenza. The vomiting in both diphtheria and influenza was due to irritation of the vomiting centre in the medulla oblongata. Oculo-motor pareses, even amounting to ophthalmoplegia, had been noted in influenza, and they seemed quite to resemble the diphtheritic cases. It was worthy of comment that similar symptoms had been noticed in tetanus and hydrophobia.

Dr. PARAMORE mentioned an instance of hyperpyrexia in association with influenza, in which the temperature rose to 111° F. before death.

Dr. ALTHAUS, in reply, said that, as no other theory had been propounded in opposition to that which he had stated, he took it that his was accepted. We had to deal in these cases with a large amount of local nerve disturbance, but it was combined with central nerve disturbance also. He referred to a case in which a man, after two attacks of influenza, became melancholic, hemiplegic, and passed into a condition of general paralysis of the insane. Another patient of temperate habits, after an attack of influenza, developed a complete left hemianæsthesia. From this he recovered, but he had since died with all the signs of spastic spinal paralysis, which had developed much more rapidly than was the case in syphilis. That the disease was central at first was proved by the very great prostration, which was indicative of lesion of the *nœud vital*. He could not at present produce a post-mortem record to illustrate the bulbar congestion. Statistics showed that the French army suffered from influenza to an extent greater by 3·2 per cent. than that of the German army, and in the latter revaccination was more stringently carried out.

Dr. SAVAGE, in reply, said it was remarkable how often of late he had noticed that melancholics with a rapid pulse had a previous history of influenza. He could not say that insanity was a prophylactic of influenza, but returns from both England and the Continent showed that of the inhabitants of asylums the patients were much less frequently attacked than were the attendants. The proportion was usually 50 per cent. of the attendants and 10 per cent. of the patients. Many had not associated the mental conditions with the antecedent influenza, but in this connexion it should be remembered that with both syphilis and influenza the instances of resulting mental mischief did not usually come under the notice of those practitioners who had seen the primary stages of the disease.

OBSTETRICAL SOCIETY OF LONDON.

On the Relation between Backward Displacement of the Uterus and Sterility and Abortion.

A MEETING was held on Dec. 2nd, Dr. Watt Black, President, in the chair.

A paper on the above subject was read by Dr. G. ERNEST HERMAN. The paper was based on an analysis of 3641 consecutive cases in the London Hospital obstetric out-patient department. The author compared cases of backward displacement of the uterus with those in which this displacement was not present. His conclusions were as follows:—1. That backward displacement of the uterus has no appreciable influence in the production of absolute sterility. 2. That backward displacement of the uterus is associated with a small amount of relative sterility. 3. That this association is chiefly in the later years of the child-bearing period. 4. That backward displacement of the uterus has no appreciable influence in favouring the occurrence of habitual abortion. 5. That it is associated with a tendency to abortion, but that this tendency is not so great as that produced by some other causes. 6. That the tendency to abortion associated with backward displacement of the uterus is chiefly in the later years of the child-bearing period. The author did not think that mechanical conditions were sufficient to explain these facts. He regarded the displacement, many of the symptoms associated with it, and the relative sterility and tendency to abortion, as alike manifestations of a condition of the general health.

Dr. INGLIS PARSONS related two cases of abortion due to retroversion, and followed by pregnancy and delivery at full term after the uterus had been replaced and kept in position by a Hodge pessary.

Dr. ROUTH thought the paper useful, but that it contained fallacies. He thought the author should have taken into account the age and the capability of the husband, bad habits, incompatibility, syphilis, and the short time the sperm was sometimes allowed to remain in the vagina.

Dr. GRAILY HEWITT said that in 139 cases of retroflexion in married women observed by himself in private practice, he had found 35, or 25 per cent. of them absolutely sterile, or 1 in 4. In 21 cases out of 139 there had been one child only, and in 12 cases there had been two children, showing that backward displacements of the uterus had an influence on relative sterility. He thought the paper would favour the conclusion that changes in the uterine form are liable to interfere with the due performance of uterine functions.

Dr. LEITH NAPIER pointed out some errors and defects in the tables. He referred to his own paper on abortion in vol. xxxii. of the Transactions. In his cases there was an average fertility of 10·383. The number of aborting women in whom uterine displacement was an evident clinical condition was 9·09 per cent. He had shown that syphilis was not so important a factor in abortion, and now it was shown that retro-displacement was similarly not so important.

Dr. WALTER GRIFFITH asked if the examination of the uterus in all these cases had been made before the first pregnancy or after several.

Dr. HERMAN, in reply, said that the sequence of events related by Dr. Inglis Parsons might be merely coincidence. He thought the fallacies mentioned by Dr. Routh applied to both cases with and those without displacement, and so his own argument was not invalidated. He thought Dr. Hewitt's reputation had led many to consult him because of sterility, and therefore his figures showed a large percentage of sterility. The discrepancy in the numbers between Tables 1 and 3 was because in the latter table some cases in which he had not a record of the precise number of children and abortions, although he knew them to be fertile, were omitted.

The following specimens were shown :—

Dr. JOHN PHILLIPS: Retroflexed Fœtus, with Ectopia Viscera and Spiral Meningocele.

Dr. HERMAN: (1) Rupture of the Uterus; (2) a Cardiac and Amorphous Fœtus.

Dr. BOXALL: Placenta in a case of Early Abortion.

Dr. MCCANN: Tubercular Salpingitis.

Dr. PLAYFAIR: (1) A Case of Superfœtation; (2) Uterine Appendages removed on account of Fibromyomata, the tubes distended with pus—a case showing the behaviour of the pregnant uterus in chorea. A paper on this subject was read by Dr. Braxton Hicks at the November meeting, and was accidentally omitted in the report to the journals. The author related the history of a case under his own care. The patient was young and single, and had four months' amenorrhœa. There was a swelling in the lower part of the abdomen, reaching to the umbilicus; its shape was not symmetrical, an oval hard lump being felt on its upper left side. The next day this swelling had disappeared, and on the other side lower down another hard lump was felt in what was evidently the uterus. This after a day or two subsided, and during the time of her residence in the hospital these similar variations of hardness were noticed in the uterus. She had albuminuria and a systolic bruit over the heart; the chorea movements continued throughout pregnancy. Labour was normal, and she made a good recovery. This condition of the uterus during pregnancy with chorea had not hitherto been observed.

Reviews and Notices of Books.

Diseases of the Skin. By W. ALLAN JAMIESON, M.D., F.R.C.P. Ed. Third Edition, revised and enlarged. Edinburgh: Young J. Pentland. 1891.

A Practical Treatise on Diseases of the Skin. By HENRY G. PIFFARD, M.D. London: H. K. Lewis. 1891.

BOTH author and publisher must be congratulated on the appearance of a third edition of Dr. Jamieson's work in so short a time. Such a practical recognition of its merits leaves the critic little to do except to notice the changes and additions of the present issue. The latter include articles on dermatitis herpetiformis, pityriasis maculata, lymphangioma circumscriptum, pityriasis rubra pilaris, xanthoma diabeticorum, and leprosy. The chapter on dermatitis herpetiformis contains an additional coloured illustration, which gives a fair idea of one phase of the disease. After discussing the general symptomatology, the author gives six illustrative cases of different varieties of this multiform disease; among them are the cases identical with Mr. Hutchinson's recurrent summer eruption and Bazin's hydroa vacciniforme. The author agrees with Duhring that impetigo herpetiformis should be considered a variety of dermatitis herpetiformis, in spite of their differing in several important respects and of Kaposi's strong protest against such an association. He does not endorse Schwimmer's recommendation of thymol applied externally as a curative agent for dermatitis herpetiformis; in two cases in which he tried it the result was unsatisfactory. In this, as in many other diseases, he recommends, in addition to other measures, baths of potassa sulphurata, two ounces in thirty gallons, with the addition of starch, but at a temperature below 98° F. In his remarks on pityriasis rubra pilaris described from a case in his own practice, he considers it practically identical with Hebra's lichen ruber acuminatus, a point on which there has been a schism in the Vienna school. In this and in pityriasis rosea, which is briefly described, he recommends the potassa sulphurata baths. He considers pityriasis rosea a rare disease, and most frequent in the female sex. In England it appears to be more common. We cannot agree with him in comparing lymphangioma circumscriptum with herpes zoster as regards its appearance. In a case under his own care salicylic and creasote plaster had a beneficial effect. It will be seen, therefore, that the author has kept his work up to date as far as the lines on which the book is framed permit. The treatment, as in previous editions, to a great extent follows out the principles and practice as laid down by Unna, and the practitioner will find the precepts of the Hamburg school ably set forth, with the results of the author's experience. The coloured illustrations are the least satisfactory part of the work, that of lichen verrucosus and acne varioliformis being actually misleading: the first probably from faulty execution as to colour &c.; the second from the case being widely different from the usual type. Apart from these slight defects, this edition, like its predecessors, is creditable to the author, and will be welcomed by the practitioner who seeks its guidance.

The handsome quarto volume by Dr. Piffard, a well-known American author, is a photographic Atlas of Diseases of the Skin, combined with a general description of the chief clinical features of the most important diseases and useful hints on treatment. It contains fifty full-page photographs, the subjects of which are for the most part well selected, while their execution shows that the author is an accomplished photographer. Most of them are fine specimens of photography, but here and there the general pictorial effect has been preserved at the expense of the lesion, which consequently lacks sharpness. Apparently they are reproduced by some form of collotype. Besides these there are thirty-three figures in the text in half tone, which are very beautifully executed, and show that in this method of reproducing photographs America is far and away ahead of any similar work in this country. We may take it that this work presents photography as applied to the delineation of diseases of the skin in a very favourable aspect, and we can therefore form a good idea of its value in this respect. It goes without saying that as a means of showing distribution it does all that is required; but as a means of assisting in diagnosis it not only fails to convey a correct idea of many forms of disease, but it may even be misleading, partly from the great reduction in the size of the lesions and partly from reds and yellows being shown as deep black. As might be expected, it is most successful where form has to be delineated, as in syphilitic dactylitis, elephantiasis (Plates 14 and 24); where there are sharp contrasts in colour, as in leucoderma, or "vitiligo," as Dr. Piffard prefers to call it (Plates 30 and 31), and melasma (34); or where lesions are defined, as in ichthyosis (48) and alopecia areata (49), in leprosy in an advanced stage, and in new growths, such as keloid, depicted in a very fine block, fibroma (25), and several instances of lupus, though here the author is not quite as successful as he might be, except in Fig. 11. On the other hand, where the lesions are

small, as in scabies or lichen planus, or ill-defined, as in many inflammatory diseases, or where colour is important, as in morphœa, photography fails to show anything of value, except distribution, though to those who have seen the actual case it may serve as an excellent memorandum. Turning to the letter-press, the diseases do not appear to be arranged on any definite plan; thus the first plate is a drug eruption, then follows a series on eczema, psoriasis, syphilis, &c. The author's nomenclature is frequently too independent—e.g., nudose for exfoliative eczema, chromophytosis for tinea versicolor, which he states is due to the microsporon audouini instead of to the microsporon furfur. Other names new to us are dermatitis multiformis, mammillitis maligna, and sudolorrhœa; even if these were all improvements, they hinder rather than advance the knowledge of the subject. The descriptions are clear and concise, and the author has formed opinions of his own from independent observation. In treatment, also, he has by no means followed in the beaten tract, and many of his suggestions are well worthy of consideration and trial. The index is limited to the diseases described, and might therefore have been fuller with advantage. On the whole, the author has been successful in his task, while both he and the publisher may be congratulated on the admirable way in which the work is got up.

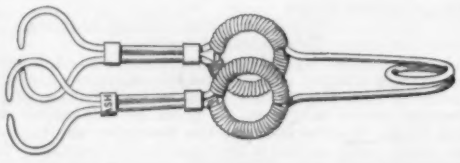
Pulmonary Tuberculosis: Etiological and Therapeutic. By R. W. PHILIP, M.A., M.D., F.R.S.E. Edinburgh and London: Young J. Pentland. 1891.

THIS interesting *brochure* is founded on the author's experiments undertaken to determine the manner in which the noxious material elaborated by the tubercle bacillus acts on the organism after it has been absorbed. For this purpose he availed himself of alcoholic extracts of phthisical sputum, which were injected into frogs and other animals. The effects following upon such injections were noted in regard to their action on the system generally and upon the circulation. They showed that the toxine acted mainly as a depressant, especially upon the heart, and, what is of considerable importance, Dr. Philip found that this action was to a great extent neutralised by atropine. The application of these deductions from experimental observation to the treatment of pulmonary tuberculosis forms the main purport of the essay. The author adopts a division of the stages of the disease which is rational and appropriate. He considers that in every case of phthisis there is evidence of a period of early catarrh preceding bacillary infection, the catarrhal changes affording a nidus for the development of the microbe. The recognition of this pre-bacillary period is important, as during this time much may be done by judicious management to prevent the subsequent liability to infection. In the next stage—that of the bacillary invasion—the line of treatment is essentially tonic, together with remedies for the relief of catarrh, the object being to render the tissues less suitable for the growth of the bacillus. He points out that it is useless to attempt to destroy the bacillus within the body, and attributes the undoubted efficacy of terebinthinate remedies to their action in modifying the "soil." He advocates the intra-tracheal injection of eucalyptus (ten minims of a 20 to 30 per cent. mixture, with bland oil), and states that he has had excellent results therefrom. Lastly, in the stage of phthisis proper, with hectic &c., when the dangers are largely those which accrue from the absorption of the toxines, he suggests the free use of belladonna, which his experiments showed to have so marked an antagonistic effect to them. He points out that this drug was advocated by Trousseau and by Bartholow. The essay is written in clear and cogent style, and is well worthy of careful attention.

New Invention.

ABSORBENT WOOL HOLDER.

THE patient to whom gas has been administered for dental purposes has almost invariably a very strong desire to be allowed to remain perfectly undisturbed until consciousness has completely returned. That the tilting of the dental chair and the inclination of the head forwards to prevent blood or matter from collecting in the pharynx whilst in a state of semi-consciousness is subjectively extremely disagreeable only requires to be experienced for verification. Messrs. Ash have made for me a pair of small steel wire spring forceps, the use of which, when charged with absorbent cotton-wool and inserted between the jaws over the seat of the extraction, fully obviates any necessity to interfere with the position of the patient. The accompanying illustration sufficiently explains the instrument. When from the nature of the operation it is necessary to have a longer anæsthesia than can be obtained from one complete administration



of gas the forceps are especially useful. The operator having proceeded as far as is compatible with insensibility, I insert the wool holder over the seat of the operation, reapply the face-piece, and cause a further supply of gas to be inhaled until unconsciousness has been reinduced. On removing the face-piece, the forceps will be found to have absorbed all the discharge, and the gum will present a clear surface for the operator to proceed with. The spring of the forceps keeps them well in position, and there is no chance of the wool interfering with respiration if it be properly fixed in the arms of the forceps to start with. By their aid I thus avoid the necessity of giving any ether in dental work, except in those very rare cases one experiences occasionally which are not satisfactorily anæsthetized by gas alone. Patients are thus saved the irritating odour of ether and the nausea which usually ensues from its narcosis, and the atmosphere of the dental operating-room is unsullied by its vapour.

Old Burlington-street. PERCY EDGELOW.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a meeting of the Council held at their rooms, 3, Bolt-court, Fleet-street, on Dec. 15th, the Council having had under consideration the case of Mr. A. L. Haynes of Evesham, and the verdict returned by the coroner's jury empanelled to inquire as to the cause of death of Mrs. Allen, which verdict reflected on Mr. Haynes' professional conduct, the following resolutions were unanimously passed: 1. That Mr. Haynes gave all necessary attention to the case of Mrs. Allen. 2. That the evidence given at the inquest by Mr. J. F. Campbell, who described himself as assistant overseer of the parish, and professed to have acted as such, had a misleading effect, as Mrs. Allen, the patient in question, was not a pauper. 3 That the verdict, as returned by the jury, which stated that Mr. Haynes had been guilty of neglect, without any expression of opinion that his action had in any way whatever contributed towards the death of the deceased, is totally unsupported by evidence, and not in accordance with recognised law.

THE LANCET.

LONDON: SATURDAY, DECEMBER 19, 1891.

THE Hospital Sunday Fund is one of the most creditable institutions of the country, and the annual meeting at the Mansion House, at which the Council of the Metropolitan Fund is constituted, and from which it receives its sanctions, is one of the most interesting events of the year. It is in a way unique. The meeting on Monday was an excellent example. Despite the gloom of December there was a good gathering, and the representation of all sorts and conditions of men on the platform was catholic in the best and most religious sense. There was the lord and the commoner, the Jew and the Greek, the Protestant and the Roman Catholic, the churchman and the nonconformist, the shrewd man of business looking on the hospital problem from its financial side and the medical man from the clinical side, and all from the humane and pitiful side—anxious, on the one hand, that the hospitals should be really available for the relief of suffering and poverty, and, on the other, that they should not be put to wrong uses. Such a meeting realises the best conception of an evangelical alliance—of wealth for the relief of poverty, of healthy men for the relief of sick ones, and of men of all creeds for the relief of suffering humanity without reference to creed. Apart from any benefit the hospitals receive from such an institution, the institution itself is a blessing. It bridges over the gulfs which separate men, and by such means individual and class prejudices are overcome. For the hospitals themselves it is an undoubted advantage. The presence of leading members of the administrative staffs of the London hospitals at the meetings of the Hospital Sunday Fund is a constant proof of the value they attach to its contributions. On Monday last the chief speaker at the annual meeting of the constituency was Lord SANDHURST, the able chairman of the Middlesex Hospital, and the President of the Lords' Committee which has been inquiring into the position and work of the hospitals of London. The choice of a speaker could not have been more satisfactory. We may have to wait some time for the report of the committee itself, and we may take this opportunity of saying that we expect much from it in the way of wholesome and acute criticism. But, meantime, for philanthropic and religious purposes, and in the light of Christmastide, we have this judgment from no less an authority than Lord SANDHURST: "I have been all over the general hospitals of Paris, Vienna, Berlin, and the Hague, and there was, with one exception (a hospital at Berlin, founded on English lines by the Empress FREDERICK), not one which came near to the hospitals of London in point of excellence." This is enough to reassure the London public that its hospitals are still among the worthiest, if not the very worthiest, of all its charities, to convince the churches that they are doing real religious work in the annual contributions to the Hospital Fund, and to confirm the press in its general support of this great undertaking. For ourselves, as the Chief Rabbi was kind enough to indicate, we have done our utmost by the issue of Special Supplements (containing original matters of interest obtained independently from the various hospitals, and distributed gratuitously throughout the places of worship of the metropolis), and in other ways to advance the Fund, in originating which the late Dr. WAKLEY, as Editor of THE LANCET, had so great a part. We have no intention of relaxing our efforts. We are never slow to point out where hospital administration is at fault. We try to study every well-substantiated charge and case of the kind, believing that in so doing we are doing a friendly act towards the cause itself. But such charges are a mere accident in the great volume of splendid service which the hospitals represent, by which the lame are made to walk, the blind to see, and the deaf to hear. It is not the least happy feature of the augury of the Fund for the coming year that we have a Lord Mayor who seems specially anxious that no pains shall be wanting on his part to uphold and even beat the good record of his predecessors. We can only endorse his wish that the Fund in 1892 may reach the sum of £50,000, thus exceeding this year's as that of the present year's record exceeds all previous ones.

THE chief changes to be introduced by the Conjoint Examining Board in England under the new curriculum will probably be made in the examinations in the advanced subjects. In place of the existing final examination, which cannot now be passed earlier than the end of the fourth year of professional study, and two years after passing the second examination, two examinations will in future be substituted. There will therefore be four examinations for medical students who have registered after the end of this year, instead of the three which are now enforced. Systematic medicine and surgery will be taken at the end of the fourth year after registration as heretofore, provided that *one* year at least shall have elapsed after the passing of the second examination; but another year's attendance on practical medicine and surgery will be required before the final examinations are passed. The subject of midwifery and diseases peculiar to women may be taken at either of these examinations. The last examination will be entirely of a clinical character so far as medicine and surgery are concerned, and these will be passed together, or at least half the number of marks required in one subject must be obtained before the candidate will be allowed to pass in the other, no matter how proficient he may have shown himself in one subject. Such is an outline of the probable changes in the examinations which will be introduced for candidates registering on and after the 1st prox. We would hope that the time-limit in the various parts of the examination, and the present system of marking, which are almost as unfair to the candidate at his final examination as at the others, and to which we referred very fully in our last week's issue, will be improved under the new system. If the committee of management cannot see a way out of the existing method, which has been and is so freely condemned by every other educational authority, the General Medical Council must again urge

these improvements on the Councils of the Royal Colleges, and not allow the recommendations of its Visitors to be ignored for another ten years. It is also incumbent on the Council to see that an examination in clinical medicine is what its name implies. The practical examination of past years excludes every case in medicine that cannot be brought to the Examination Hall on the Embankment. Chronic chest, abdominal, and nervous cases, about the diagnosis of which even experienced physicians are not always agreed, are always brought forward, and these form the crucial examples of disease on which the student's knowledge is tested. He is well aware that it is impossible for the examiners to investigate his acquaintance with acute cases, and that it will not matter if he be not able practically to separate an acute pleurisy with effusion from a pneumonia, or acute articular rheumatism from typhoid fever, so long as he can repeat his text-book rules. The difficulties in a practical examination in surgery, midwifery, and diseases of women are very great, but in practical medicine these could easily be overcome if our great hospitals and workhouse infirmaries were properly used for this purpose. The curriculum of study after the second winter session, when the student should pass his second examination in anatomy and physiology, will be changed in many respects. Two years of hospital practice with nine months' clinical lectures and practical instruction in medicine, midwifery, and surgery will be required before the third examination; and if midwifery be taken at this examination, a course of not less than twelve clinical or other lectures, with practical instruction in diseases of women, must also have been attended. There seems to be no inclination on the part of the teachers to allow any time to be spent by the student with a general practitioner, so that the chief argument placed before the General Medical Council in favour of an extended curriculum will probably be entirely ignored by the Royal Colleges. Clinical demonstrations (number not mentioned) must be attended at a recognised lunatic asylum; but evidently no more than six months' attendance at any hospital than one with a medical school attached will be recognised. Attendance at two special hospitals will, if recognised, be accepted. Pathological histology may be taught as at present, but instruction in making post-mortem examinations will be required.

Therefore, so far as London medical students are concerned, the outcome of the recent decision of the General Medical Council will be (if the scheme of the Royal Colleges come into force) that elementary biology will displace elementary physiology in the first year of study; pharmacy may be taken early or late; the new pharmacology will displace the old-fashioned materia medica, and in the interest of the student this will require the preparation of a careful schedule and a careful limit at the examinations; twelve lectures on diseases of women (already given at most schools), an additional year of clinical study, which must either be as heretofore at a general hospital or for six months at two recognised special hospitals, with an unspecified number of demonstrations at an asylum; and these will complete the alterations suggested. The increase of expense to the medical student is at once apparent; the advantage to the profession or the public is not so obvious. The examinations of the Royal Colleges must undergo a thorough alteration, and be assimilated to the corresponding examinations at the universities. Unless this be done, the London student will continue his exodus to schools with fewer clinical advantages rather than be subjected to the examination system of the London Colleges.

THE presidential address delivered by Mr. SHIRLEY MURPHY to the Society of Medical Officers of Health embodies an able argument as to the real value of such appointments in the interests of the public, and it at the same time sets out the aims which every medical officer of health should have in view, in order that his office should secure such advance in the science of preventive medicine as is necessary to increased knowledge of the causes of disease and the promotion of public health. As far back as 1838 it was understood by those who looked ahead that any machinery by which the causes of sickness and mortality among the poor could be reduced would be a truly economic measure by reason of the diminution of the heavy burden cast upon the rates by such causes. The reports of the Royal Commission of 1844 and 1845 contain ample evidence to the effect that it was then felt that by the careful observation of the causes of disease upon large classes of the community the mode and extent of their operation might be ascertained, and the power of diminishing and preventing them be acquired; and it was on the basis of this knowledge that the first provision was made for the appointment of medical officers of health. At first it was assumed that the duty of such an office would be best performed by Poor-law medical officers, and a recommendation to the alternative effect that "the local administrative body have power to appoint ..... a medical officer properly qualified to inspect and report periodically upon the sanitary condition of the town or district, and to ascertain the true causes of disease and death," was to be "subject to the approval of the Crown." Matters have materially changed since then, and now it is becoming more and more the custom that medical officers of health should give their whole time to the duties of their office. There is, however, a fear that we may be passing with undue haste to the other extreme, for preventive medicine ought never to be separated from a carefully trained and maintained knowledge of the clinical and pathological features of disease. Hence we are glad to find Mr. MURPHY referring with approval to the statement that it was long ago deemed desirable that the medical officer of health should be associated with some medical school or hospital in order that he might be kept conversant with the practical aspects of his profession.

After discussing the question of qualification, as tested by examination, for the post of health officer, Mr. MURPHY refers to a number of the researches carried out by the medical staff at Whitehall and others as typical of the methods to adopt with a view to the extension of our knowledge as to the prevention of disease. The recognition of common and removable causes, the differentiation between the diseases which one and another cause can or cannot produce, the distinction between the varieties and intimate characteristics of filth in so far as the production of disease is concerned, and the various methods by which diseases of dif-

ferent sorts, and having each a different natural history, can be prevented, are all to a large extent the outcome of the labours of the last half-century, and they are all matters which have been the result of much labour and research on the part of officers in different parts of the country. Taking such work as typical of that which needs to be still further promoted, Mr. MURPHY rightly holds that the health officer should be constantly occupied in seeking for increased knowledge of the causes of disease, and in incessant watchfulness for hints as to how administrative methods may best be made to meet the social changes which are constantly taking place. Gradually the public are coming to appreciate this, and thus it comes to pass that many an appointment and duty that were formerly permissive are now becoming compulsory, and the newly granted powers all aim at the result that in the end there shall be no failure to protect the highest interest of the public—namely, the public health. If this is to be attained, we must resist any tendency to turn health officers into mere administrators on the one hand, or into mere consultants on the other; the health officer must remember, above all things, that his advice should be based on a knowledge of medicine as a science, that his administration can only be efficient in so far as he himself maintains and cultivates that knowledge by personal study and investigation of the causes of disease, and that he will soon lose touch with the progress that is being made, and which he should utilise for the prevention of disease, if he fails to keeps himself fully acquainted with the clinical features of the diseases with which he has to deal. All this, and more, is admirably indicated in Mr. MURPHY'S address, the perusal of which will repay all those who are engaged in the public health service of the country.

H.R.H. THE PRINCE OF WALES has just escaped, and only just, the great domestic calamity of the death of one of his two sons, Prince GEORGE, who has passed through a dangerous attack of typhoid fever; for whatever phase this disease may assume, it cannot be otherwise than very grave. We are quite aware how fully the members of our Royal Family acknowledge the hand of Providence working through human agency in the many mercies vouchsafed to them. Such sentiments are potent to stimulate energy and develop sympathy for others apparently less mercifully favoured. Therefore it is that the Prince of WALES, as President of Wellington College, does, we doubt not, feel a keener sympathy for the parents of the boys who have recently died from disease engendered during their abode there. The Prince of WALES, as successor to the late Prince Consort, the first President of the College, cannot do otherwise than regard the pupils at this institution as specially under his Royal Highness's protection.

The College was founded thirty-two years ago as a national memorial to the Duke of WELLINGTON, out of money mainly subscribed by the officers of Her Majesty's army, each officer giving up a portion of his annual pay for this purpose. But it was owing to the Prince Consort's forethought, and at his own and Her Majesty's special desire, that the monument of the great Duke took the form of a public school for the special benefit of the sons of officers who had died in the service of their country, and of those still on active service who were ready to do likewise. It may not be so generally known as it should be that every detail of the building at its foundation, and every detail of organisation for the purposes intended, were the outcome of the Prince Consort's own thought. The first head master, the present Archbishop of CANTERBURY; Colonel TALBOT, the first honorary secretary, now vice-president; the assistant masters, the medical officer, and the late Mr. CHANCE, the secretary, were all selected and approved by the Prince Consort for their respective offices. No trouble seemed too much, no detail too minute, to enlist and rivet the attention of the Prince in order to ensure the success of Wellington College, as a fitting memorial to his friend, Her Majesty's most devoted subject, the "Great Duke." The Prince Consort regarded the students with parental affection, and spoke of them as "my boys." For these reasons, if for no others, the Prince of WALES may be expected to take more than ordinary interest in Wellington College. In addition to these reasons, his Royal Highness, in his capacity of Field Marshal, may also be expected to specially interest himself in a school intended for the benefit of the sons of officers still serving in Her Majesty's army. We can conceive of no institution more calculated to attract the interest of loyal Englishmen than Wellington College. For some time past the College has been under a cloud largely through the periodical recurrence of illness among the boys, culminating in the death of two of them in one week. The number of pupils, in proportion to the accommodation the College affords, has never been so low as recently. There has been a growing mistrust of the College in the minds of parents. The Prince Consort's judgment in his selection of the site is, with due respect to his memory, called in question among those interested in the institution. Our reverence for the memory of the Prince Consort is such that we feel justified, as representing the sentiment of the medical profession, in deviating from our accustomed reticence and appealing to his Royal Highness the Prince of WALES, as President of Wellington College, to reorganise the institution, so that these lamentable outbreaks of preventable disease shall no longer prevail. We believe we know more about the sanitary condition of the place and the causes and means of prevention of these periodical outbreaks of fatal disease than is known or can be known to the authorities themselves, or to anyone they may depute to inquire into it. The touching letter (in *The Times* of Dec. 11th) of Colonel MOYSEY, who has lost one of two sons, cannot fail to rouse the sympathy of all persons endowed with common humanity and especially of those interested in Wellington College.

Annotations.

"Ne quid nimis."

ENGLISH HONOURS TO ITALIAN SCIENCE.

AN Italian correspondent writes:—"On the 10th inst. the academic world of Rome entertained at a banquet the senator Stanislao Cannizzaro, in celebration of the bestowal on him of the Copley medal by the Royal Society of London. The Accademia dei Lincei (the 'Royal Society' of Rome), the Accademia di Medicina, and the Senatus Academicus of the 'Sapienza' were fully represented on the occasion,

impressed, as all of them were, by the fact that the author of the 'Filosofia Chimica' has had but three predecessors in the honour just conferred upon him, those three being Volta, Plana, and Matteucci. The chairman was the eminent mathematician and engineer, the Senator Brioschi, who in a few felicitously chosen sentences conveyed the sense of pride shared by all Italians at the bestowal on their compatriot of the 'blue ribbon' of science. Signor Villari, Minister of Public Instruction, followed, and dwelt on the consummate merit of Cannizzaro, who from phenomena could ascend to law, and from law could evolve scientific harmonies. The Senator Todaro, the distinguished Professor of Anatomy in the University, gave the toast of the 'Royal Society of London,' which was as cordially received as it was eloquently proposed. Professor Cannizzaro thereafter made a most instructive as well as effective speech, in which he showed that it was in the effort to make his prælections clear to successive generations of students that he had trained himself to reach those laws, the coördination of which had won him the recognition of the greatest court of scientific arbitration in the world. This he illustrated by his mode of teaching the atomic theory to his young audiences, and proved how the university chair and laboratory can become as fertile in results for the painstaking professor as for the pupils for whose enlightenment he labours. Such was the spirit in which, for thirty-three years, he had met his class, and he had found his reward in the congratulations of his colleagues and compatriots on the distinction conferred on him by the Royal Society of London. Their participation in his success enhanced it in his estimation a hundredfold, for, in the words of Cicero, 'Qui tantus fructus esset in rebus prosperis, nisi haberet qui gauderet illis æque ac ipse?' Professor Cannizzaro's speech will be published in an independent form, and, meanwhile, it may be remarked that his merits as a chemical philosopher and teacher are hardly greater than as a practical hygienist in some of the most important branches of State Medicine. The monograph, entitled "Analisi Chimica dell Acque Potabili della Città di Roma," in which, under his direction, some of the ablest of Italian chemists coöperated, and which, published at the end of 1884, was fully dealt with at the time in THE LANCET, is but one out of many proofs he has given that the highest speculative power may coexist with that of the minutest, most painstaking research, and that conscientious collecting and sifting of facts is the soundest basis on which to crown the edifice of theory."

THE LONDON WATER-SUPPLY.

THE subject of the present water-supply to London was fully entered into in a special article of recent issue in THE LANCET, and many of the statements there made with regard to the quantity and quality of the water abstracted from the rivers Thames and Lea are now confirmed in the official report of the water examiner. In this report the unsatisfactory condition of the water supplied by the companies during the month of October receives considerable comment, both by the expert chemists acting on behalf of the directors of the companies (Drs. Odling and Tidy and Professor Crookes), and the expert, Dr. Frankland, who is specially appointed to report to the official water examiner. The former state that, as a consequence of the exceptionally flooded state of the rivers during the greater portion of the month of October, the character of the water supplied to the metropolis, in respect to its degree of freedom from organic matter, was on the whole less satisfactory than it has been found to be for a long time past. The New River Company's supply, though appreciably affected towards the end of the month, maintained a high average standard; while the supply of the East London Company from the Lea, and that of the Chelsea Company from the Thames, were, owing doubtless to the large storage area of these two companies, not affected by the floods to any notable extent. In the case of the other Thames-supply companies, in different degrees in different instances, the proportions of organic matter present, as indicated by the degree of colour-tint of the water, and estimated by the combustion and oxidation processes, were appreciably in excess of the proportions habitually met with. Dr. Frankland reports that the water abstracted from the Thames by all the companies, except at Chelsea, was very seriously affected by heavy floods. It was brownish in colour, and the organic matter in solution, although chiefly of vegetable origin, had been increased in amount to a very objectionable extent. It is evident that these companies, with their present limited storage, are unable to avoid the delivery of polluted flood water. Efficient filtration had, however, been carried out in every case. The water taken chiefly from the Lea by the New River Company was only slightly affected, but that derived from the same source lower down the stream by the East London Company contained considerably more dissolved organic matter than the Thames water of the Chelsea Company, although much less than that supplied by the other Thames companies. Both waters were efficiently filtered before delivery. The deep-well waters of the Kent, Colne Valley, and East London Companies, and of the Tottenham Local Board of Health, were unaffected by the floods. They maintained their excellent quality for dietetic use, and the Colne Valley Company's water, having been softened before delivery, was rendered suitable for washing. All these waters were clear and bright without filtration.

DEATHS UNDER CHLOROFORM.

THE facts about the death under chloroform at the Ipswich Hospital have been as fully divulged as a coroner's inquiry is capable of bringing about. The facts are similar to those of many other like cases, and this inquiry is chiefly remarkable for the *ex-cathedrâ* utterances of one of the surgeons who gave evidence, with the natural result that the lay press, usually muddled by medical evidence, has been more than ever confounded in this instance. The patient was a mariner, aged thirty-six, upon whom a trifling operation was about to be performed, and was anæsthetised by the junior house-surgeon. He struggled, and almost immediately the respiration ceased. The heart subsequently failed. Restorative measures were ineffectual to resuscitate the patient. The surgeon in charge of the case is reported to have said the patient died from paralysis of respiration, that he regarded chloroform as protective to the heart, and, further, that "the old idea that persons died from the action of chloroform upon the heart was exploded." The case seems to point two lessons: first, that chloroform should not be employed for trifling operations when ether can so well be substituted; and secondly, that until the profession has more evidence before it, it is at least premature for anyone to speak of either one or the other theory as "having been exploded."

Dr. Starling has favoured us with the following particulars of the sad case of death under chloroform at Tunbridge Wells on the 28th ult.:—"The patient, a clerk, aged fifty-eight, of spare frame, but of very fair health, had suffered for some years from internal piles, which were removed by Dr. Adeney about a month before by the clamp and cautery. No organic disease being present, and nothing to contraindicate its use, chloroform was on that occasion administered by Dr. Starling on a Skinner's inhaler, was taken very well, and equally well recovered from by the patient. The result of the operation was good as regards the piles, but some folds of loose tissue about the anus remained and gave trouble; these, by the advice of a London surgeon, were removed on Nov. 28th.

The condition of the patient appeared then at least as good as on the previous occasion, and the stethoscope revealed nothing abnormal. No food was taken for three hours previously to the operation except a very small quantity of milk. As before, chloroform was administered on a Skinner's inhaler; there was no struggling, and the patient passed easily under its influence. At no time was the anæsthesia very deep, there being no stertorous breathing, and the pupils were small the whole time. For convenience of the operation the patient was placed on his left side, with the left arm drawn beneath and behind him. At the conclusion of the operation, which lasted rather over half an hour, the inhaler was removed. In about five minutes a couple of ounces of fluid, with small milk curds, were vomited; the radial pulse was felt to flicker and stop, the respiration ceasing at the same time, and the face and hands became pale. The patient was at once placed on his back, the tongue drawn forward and the head thrown back, and artificial respiration begun. Ether was injected subcutaneously, amyl nitrite applied to the nostrils, and the window opened. There being no signs of returning animation, and the head being rather congested, the anterior jugular vein was opened and some blood allowed to escape. Artificial respiration was kept up for more than half an hour, and, there being then no signs of vitality, the conjunctivæ glazed, and the pupils dilating, efforts were reluctantly given up. The post-mortem examination was made forty-eight hours later by Mr. Lammiman and Dr. Adeney. The left ventricle was contracted and empty; the right soft, and contained a little clot. Nothing abnormal was seen about the heart. No embolism was found. The brain was substantially normal; the veins of the pia mater were excessively engorged; and all the viscera were dark with engorged blood. The verdict returned at the inquest was 'Death from asphyxia from chloroform inhalation,' and Drs. Adeney and Starling were exonerated from all blame."

HOSPITAL ACCOUNTS.

WE understand that some annoyance has been felt at the discussion of the form of hospital accounts which afforded subject-matter for the leading article upon this subject which appeared in our issue of the 5th inst.; and, indeed, Mr. Ryan's letter in our last impression, stating as it did that the work of the Secretaries' Committee is not yet complete, and denying with great precision that the Secretaries' Committee had submitted any schedule of account to the Lords' Committee, was obviously a remonstrance in all but form. We desire, therefore, to point out that we are in no way responsible for what has occurred. The form in question appears in the appendix to the volume of evidence recently issued under the following heading: "Appendix M.—Paper handed in by Mr. Henry C. Burdett; Form of income and expenditure account now under consideration of London hospital authorities." Turning to Mr. Burdett's evidence for further explanation, we find at p. 735 that he introduced the form with the remark: "Now this that I am putting in now is the form which has been suggested for adoption by all the London hospitals. It is at the present time under their consideration, and no doubt, with some few modifications, it will meet the whole case." He was then asked, "Is there not a committee sitting of secretaries of the various hospitals?" To which he replied, "Yes," and then proceeded to explain how the committee had not been able to work together quite harmoniously, but how eventually they would no doubt come to an agreement very much on the lines of this form. That was our authority for saying that the form was submitted to the committee in the name of a Committee of Hospital Secretaries. Of course, if Mr. Burdett had no authority to represent this as being the work of the Secretaries' Committee, or to explain to the Lords' Committee what the difficulties attending the operations of the Secretaries' Committee were, or what its prospects of eventually surmounting them, that is a matter of which we had and could have no knowledge. Nobody, we take it, will dispute, in view of the passages quoted above, that this form was put forward in that committee's name, or that it was intended to be dealt with by the Lords' Committee as emanating from the source indicated. It must be discussed accordingly; and we have only done our duty to our readers in devoting to it, in these circumstances, an amount of attention to which upon its intrinsic merits it would not have been entitled.

TREATMENT OF YELLOW FEVER BY COLD.

IT is well known that yellow fever never develops in a cold or temperate climate, and several attempts have been made at various times to apply this fact to the treatment of the disease in tropical climates by artificially cooling the patient. Thus some thirty-five years ago trials were made with a cold chamber, the air of which was charged with oxygen, but without appreciable success. Quite recently Dr. Garcia has reintroduced a somewhat similar plan, an iced chamber being constructed so that the air within should be maintained at a temperature varying from 32° to 50° F., and nearly saturated with moisture. A fair trial was made with this at the works of the Juragua Iron Company in Cuba, where an epidemic of yellow fever had broken out, seventeen well-marked cases, in all of which black vomit was present, being treated by means of the "polar chamber." Eleven of them recovered, the mortality consequently being at the rate of 35·3 per cent., or about the same as the usual rate of mortality at the mines under other methods of treatment. The course and duration of the disease did not appear to be in any way modified by the low temperature; the urine, though in some cases considerably increased, was not altered qualitatively. The phenomena depending on acholia occurred in the same manner and at the same period as in cases treated in the ordinary way. The same may be said of the gastric hæmorrhage. The cost of a patient's treatment by cold was found to amount to about $100.

A CASE OF DEFECATION PER OREM.

AT a recent meeting of the Paris Hospitals Medical Society, M. Desnos, one of the physicians of La Charité, gave the particulars of a singular case, in which, for upwards of two years, defecation had regularly taken place through the mouth, and never by the normal channel. The subject of this perverted function was an epileptic young man, who had escaped from an asylum in the suburbs, and had been brought to the hospital owing to an epileptic seizure. M. Desnos was inclined to regard these attacks as of hysterical nature, and when after one of them indications of fæcal matter were found on his clothes, alleged to have come from the mouth, strict watch was kept upon him to detect any imposture. The patient—who had made the above statement as to his habit of defecation—was therefore guarded, and on two occasions during his brief stay in La Charité, the evacuation *per orem* took place in the presence of competent witnesses. It appears that sometimes this occurred quite quickly and naturally, with but slight efforts of vomiting; at other times it was preceded by a sort of "crisis," during which he experienced acute pain in the back in the region of the œsophagus. He had been supplied at the asylum with peppermint lozenges to dispel the taste left by the evacuation. M. Desnos states that he saw one of the "stools," which filled a porringer; the motion was formed and rather soft, and of a deep-brown colour—in fact,

obviously of the character of large intestine contents. It was remarkable that it was free from admixture with food matters, although he had had a meal only an hour previously. For some time previously to the defecation the abdomen was hard and distended, even dull on percussion in the lower region—signs which disappeared after it had taken place. In discussing the mechanism of the process—for fraud was out of the question—M. Desnos cited the unanimous opinion of physiologists and anatomists against the possibility of a reflux of the contents of the colon through the ileo-cæcal valve. On inquiry it was learnt that before the first onset of this mode of defecation the patient, during one of his frequent attempts to escape from the asylum, had injured himself near the right iliac fossa, but no trace of any lesion was present; yet it might be supposed that some communication between the large intestine and a higher point of the tract had been found secondary to some local adhesions which had prevented the normal onward passage of the contents of the bowel. The removal of the patient by the asylum authorities prevented M. Desnos from further investigating the case—e.g., by the use of coloured injections, palpation under chloroform, or even laparotomy. So that it remains doubtful whether there was any structural cause for the anomaly. M. Desnos asked for further information on the subject as respects its mechanism, and whether it might be explained by hysteria exciting spasmodic contractions of the large intestine powerful enough to force the barrier afforded by the ileo-cæcal valve. M. Legendre said that the long duration of the "buccal defecation" was the most exceptional feature of the case, of which similar instances had been recorded by Jaccoud and Fouquet. M. Rendu was surprised that the physicians of the asylum had not commented on the case before, and was evidently sceptical as to its alleged duration. At the next meeting M. Labbé said that when he was interne, under M. Briquet, in 1857, he had observed a similar case in a hysterical and cataleptic subject, who vomited not only all ingesta, but also enemata. The patient was strictly watched, and it was inferred that the ileo-cæcal valve was incompetent. In this case the fæcal material was not formed, but always of liquid character.

THE STRUCTURE AND CHEMISTRY OF FLAMES.

A VERY interesting paper on the Structure and Chemistry of Flames was read at the meeting of the Chemical Society, Dec. 3rd, by Arthur Smithells, B.Sc., and Henry Ingle, B.Sc., of the Yorkshire College, Leeds. The authors have been engaged for twelve months in investigating the chemistry of flames produced by burning known hydrocarbons, and they are still continuing their experiments. If a long glass tube be fitted by means of a cork over the metal tube of a Bunsen burner, so as to form a wider continuation of it, the flame can be caused to burn at the top of the glass tube. When the gas is turned slowly off, the flame becomes smaller and develops a sharply defined inner cone of a greenish colour; this cone ultimately becomes almost a flat disc of flame and enters the glass tube. It will, as a rule, descend at a rapid rate for some distance, then begin to oscillate, and finally either detonate and light the gas at the bottom of the metal tube or go out. If the gas-supply be very carefully regulated, the flame may be got into such a state that it will descend the tube for a short distance and then re-ascend, and in this state it is very easy to see that whilst the lower cone is moving there remains at the top of the tube a steady cone of flame of a pale-lilac colour. By heating the glass tube at one point, so as to *increase* at that point the rate of inflammation, it is possible to fix the oscillating inner cone—that is, to prevent its *re-ascent*. It is also possible to effect this by narrowing the bore of the glass tube at one point, so as to *diminish* the rate of inflammation—i.e., to prevent the *descent* of the inner cone past that point. In this way it is possible to separate the two hollow cones of combustion which constitute the Bunsen flame, and to keep them any distance apart for any length of time. This permits of the aspiration of the gases from the space between the cones without any chance of admixture of outside air or of products of combustion from the upper cone. The authors have made similar experiments with flames of liquid hydrocarbons by charging air with the vapour of the liquid by passing it through a "saturator" such as is used for producing the ether-oxygen lime-light. The vapour-charged air is afterwards mixed with more air, and, by suitably regulating the proportions, a non-luminous flame is obtained and divided into two cones. In the case of liquid hydrocarbons, the lower cone of flame usually appears to be divided by dark spaces into several petal-like divisions which are in rapid rotation. In the case of benzene vapour the following sequence of appearances is presented: starting with the orifice of the inner tube, 8 cm. or 10 cm. below that of the outer one, a luminous smoky flame is first obtained at the latter; as air is gradually added, the flame becomes less and less luminous, and an inner cone begins to develop, but before this has become non-luminous it descends to the inner tube; more air makes both it and the upper cone non-luminous, and this state may be maintained. If now somewhat *less* air is supplied, a luminous streak appears at the tip of the inner cone, and passes right up and through the tip of the upper cone. If *more* air is supplied, the upper cone of flame begins to disappear, and only the upper part of it remains; this also gradually fades away, and then there is only the lower cone left. Still more air produces a visible effect on the inner cone, the colour changing and the combustion becoming less intense, until the cone rises from its seat, passes upwards, and disappears. There is thus a gradual transition from the richly luminous flame to one consisting of a simple pale-blue cone just on the point of extinction through excess of air. The hydrocarbons examined by the authors were ethylene, methane, pentane, heptane, and benzene. Coal-gas was also used. The gases from the regions between the two cones of flame were analysed in all these cases volumetrically or gravimetrically. The results show that the products of combustion of the first cone are essentially CO_2, H_2O, CO, and H_2, and that the second cone is due to the combustion of the CO and H_2 with the external air.

LUNACY IN NEW SOUTH WALES.

The report of Dr. Manning, the Inspector-General of the Insane in the Colony of New South Wales, shows that the number of insane persons on the official registers on Dec 31st, 1890, was 3102, of whom 1906 were males and 1196 were females. The increase during the year 1890 was 128 (84 males and 44 females), the largest which has occurred in any one year. But notwithstanding the large increase in numbers, there has been no increase in the proportion of insane to population, which, it is stated, has remained almost unchanged during the last twenty years, and is less than the proportion in England. In New South Wales there appears to be at the present time a proportion of insane to population of 1 to 377, while twenty years ago the proportion was 1 to 174; the proportion in 1881 stood at 1 to 352. The admissions during the year numbered 611, a number which was not above the average rate of "occurring insanity" for the last five years. The Inspector thinks it necessary once more to invite attention to the number of patients admitted to institutions for the insane within a few months after their arrival in the colony. During the year 36 persons were admitted who had not

been six months resident in New South Wales; of these, 13 were sent to hospital direct from the ship in which they were brought to the colony, or immediately afterwards. The majority of these persons were without means, and their cost fell at once on the State. While other colonies have Acts forbidding the importation of insane and otherwise helpless and dependent persons, there is no statute of the kind in New South Wales. The Inspector is naturally at a loss to understand why such a state of things is allowed to continue for want of a short Act of Parliament. The percentage of recoveries in this colony stands high—namely, at 42·7, which is about 3 per cent. above the percentage in English asylums. The death-rate is only 6·52, and compares favourably with that in English asylums, 9·4 being the average for the past ten years. The system of granting leave to patients as a preliminary to final discharge is found to possess many advantages, and is being gradually extended. The average weekly cost per head at all the hospitals during 1890 was 11*s.* 11¼*d.*, or, deducting collections, 10*s.* 4¼*d.* We are glad to observe that, whilst the dietary of the patients was placed on a more liberal basis, very considerable alterations and improvements were made in the dietary for attendants and other members of the staff. The position of the attendants and nurses has been further improved by an increase in the number of days off duty. The special training of attendants and nurses at Gladesville has been extended to the staff at Newcastle, and it is gratifying to find that this training under a definite system, with lectures, meets with the approval and support of the Inspector, who says, "There can be no question that it has conduced to a more intelligent appreciation of, and a keener interest in, their duties on the part of the attendants and nurses, and resulted in a more judicious consideration and a more careful nursing of the patients under their care."

DUST AND DUSTING.

"IT is our littleness that sees no greatness in a trifle." This is true if success is a multiple of careful details. It is true, therefore, of perfection in every art and work, even the commonest, and among such a contemporary has assigned a place to the seemingly menial art of dusting. For, as he says truly enough, there is an art in dusting, and it is one which on every ground deserves far more studious cultivation than it usually receives. Different observers have from time to time described the components of ordinary dust, and these, it is needless to say, exhibit special characters in almost endless variety. Mineral matters, animal and vegetable débris, morbid germs—whatever, in fact, is light enough and small enough to remain for a time suspended in air, comes under this common and generic but far from harmless term. The spread of cholera and exanthematous diseases has, no doubt with perfect truth, been attributed to its influence. It is clear, then, that the method to be employed for its removal is a matter of some importance. As regards this, we need hardly discuss every suggestion of housewifery. Some would pin their faith, not without reason, to the damp duster rather than the dry one, but this will not suffice in itself, and, moreover, every kind of furniture does not bear such treatment. Where possible, of course, it is of the two the more effectual plan. Above all, however, it is needful to remember that the object aimed at is not displacement of dust only, but its removal, and for this purpose a combination of thorough daily ventilation by open doors and windows, with careful sweeping, followed by at least displacement of any dust still remaining with a cloth, is the only method alike feasible and effective. All overcrowding with furniture or with woven fabrics is to be avoided. Bed curtains and vallances are no less objectionable, and bare floors are more wholesome than the choicest carpet. Nowhere is care in these particulars more justified or more imperative than in the crowded homes of the poor. Let us but mention one other point—the healthy effect of sunlight. It is now admitted that some disease germs lose their power on exposure to light. In this fact we have a standing protest against the custom of darkening rooms with lowered blinds, or that æsthetic error which covers the window space with crossed curtains.

THE CORONERSHIP OF THE CITY OF LIVERPOOL.

BY the death of Mr. Clarke Aspinall, the coronership of the city of Liverpool, the second city in England, has been rendered vacant. Heretofore Liverpool, in the matter of the coronership, has not aided so much in developing the principle for which we fought so long and so successfully fifty years ago, as, from her eminence in matters of business importance and educational work, might have been expected. According to Sir Edward Coke, a coroner should be an upright man of sufficient knowledge and understanding, of good ability, and power to execute his duties according to his knowledge, and of diligence in the due execution of his office. With very few exceptions, the office of coroner is held either by a member of the medical profession or by an attorney. In Liverpool the office has always been held by legal gentlemen. No doubt can exist that the medical man has claims to the confidence of the electors pre-eminent over those of any mere lawyer. What knowledge of law is required for conducting an inquiry "restricted to the cause of the death of the person upon whom the inquest is taken"? "The law"—and here we quote the words of one of the most eminent of coroners, the late Mr. Wakley—"The law necessary for the due exercise of the office can be acquired by persons of ordinary capacity and memory after one day's study." Can the medical knowledge sufficient to weigh the evidence in an investigation of the cause of death be so acquired? The councillors in whose hands the appointment rests can scarcely be of that opinion. It has been urged that a medical coroner is apt to take a biased view of the medical evidence; but this is a flimsy argument, for do not the associations and the avocation of an attorney render him as ineligible, if not more so, on similar grounds? It is a very significant fact that there has never been an instance of an inquest held by a medical coroner being quashed, whereas inquests held by attorney coroners have been frequently quashed for legal informality. Numerous instances can be cited where the judges have upheld the medical coroner's decision when it has been sought to set it aside. Leaving these general considerations, it appears that Mr. F. W. Lowndes, well and favourably known to the medical men of Liverpool as an authority on forensic medicine, and to the members of the Council who will make the appointment as an old and valued servant of fourteen years' standing as surgeon to the city police, is an applicant for the office. Nothing could be more reasonable than his promotion to a higher and more honourable office, more especially as Mr. Lowndes is strongly supported in his candidature by his medical brethren. Evidence of the extent of friendly feelings of the medical profession in Liverpool towards Mr. Lowndes may be obtained from the following letter, which has been addressed to him, extensively signed by his colleagues in Liverpool: "Dear Mr. Lowndes,—We, the undersigned, of your fellow medical practitioners in Liverpool, believing that your exceptionally wide and accurate knowledge of the legal bearings of medical questions would enable you to fill the office of coroner with credit to yourself and much advantage to the community, beg to express the hope that you will become a candidate for the post, and to assure you of our warm support in case you consent to do so." Again, at a meeting of the Liverpool Medical Institution, held on Thursday, the 17th inst., the

following resolution appeared on the agenda: "Considering the nature of the coroner's duties, this meeting of the Liverpool Medical Institution is of opinion that they can be more efficiently performed by a medical man who has thoroughly acquainted himself with the legal bearings of medical questions than by any gentleman who has not had the advantage of a medical training; and believing that Mr. F. W. Lowndes possesses in an eminent degree the necessary qualifications, this meeting heartily supports his candidature, and begs respectfully to recommend him to the City Council." We hope that the excellent example of Birmingham in appointing Mr. Oliver Pemberton as coroner for that city will help to remove from the minds of the members of the City Council of Liverpool any remains of prejudice against the appointment of a medical man to a post which is eminently a medical one. The office of coroner is no sinecure in such a city as Liverpool. During the last year there were 799 inquests held before Mr. Clarke Aspinall, in addition to which 897 other cases of death were reported to the coroner by the police and others, thus making a total of 1696 cases of death investigated by the coroner during the year. One of our contemporaries suggests, surely facetiously, that it will promote "public convenience and local economy" should the Home Secretary be induced to combine the office of coroner with that of the deputy stipendiary magistrate. Anyone who is able to read between the lines of the report of Dr. Garson concerning the illness of Mr. Clarke Aspinall cannot fail to learn that the late coroner undoubtedly shortened his life by excessive work not connected with his office. The two offices are perfectly distinct, and ought not, especially in a town like Liverpool, to be vested in the same person. There is a limit even to the powers of the most able and energetic beyond which it is dangerous to advance, even on the spurious plea of "convenience and local economy."

RECURRING OCULAR PARALYSIS.

IN the *Riforma Med.*, quoted in a recent *Centralbl. für Klin. Med.*, Massalongo directs attention to the condition of so-called ophthalmoplegic migraine. This was at first regarded as a periodic or recurring weakness of the third nerve, depending upon an affection of the nuclei, until Charcot first gave it the name which we have used above. The author found at a necropsy on a patient suffering in this way that the symptoms depended on an inflammatory process or a new growth in the pia at the base of the brain, which affected the nerves which were pressed upon, and so increased the vaso-motor effects to which the varying conditions by exposure to cold, excitement, depression, menstruation, or dyspepsia gave rise. Such an explanation of the phenomena in one case suggests the possible presence of a demonstrable lesion in others to account for symptoms which, although associated with headache, have probably no necessary connexion with migraine.

IMMUNITY AND INFECTION.

IN the *Medical News* of Nov. 7th, 1891, Dr. A. C. Abbott contributes an interesting review of some of the more important contributions to our knowledge with regard to immunity and infection. After a consideration of the investigations of Chauveau, Pasteur, Metchnikoff, Martin, Buchner, &c., he sums up his conclusions as follows:—1. That of the hypotheses that exist of the explanation of immunity, that which assumes acquired immunity to be due to reactive changes on the part of the tissues has received the greatest support. 2. That immunity is most frequently seen to follow the introduction into the body of the products of growth of bacteria that in some way or other have been modified; this modification may be artificially prepared from the products of virulent organisms, and then introduced into the tissues of the animal; or the organisms themselves may be so treated that they are no longer virulent, so that when introduced into the body of the animal they eliminate poisons of a much less vigorous nature than is the case when they possess their full virulence. 3. That immunity following the introduction of bacterial products into the tissues is not the result of the permanent presence of these substances *per se* in the tissues, or of a tolerance acquired by the tissues to the poison, but is probably due to the formation in the tissues of another body that acts as an antidote to the poisonous substance. 4. That this protecting proteid that is eliminated by the cells of the tissues need not of necessity be antagonistic to the life of the organisms themselves, but in some cases must be looked upon more as an antidote to their poisonous products. 5. That in the serum of the normal circulating blood of many animals there exists a body that is capable, outside of the body, of rendering inert bacteria that, if introduced into the body of an animal, would prove infective. 6. That in many instances infection may be looked upon as a contest between the bacteria and the tissues, carried on, on the part of the former, by the aid of the poisonous products of their growth, and resisted by the latter through the agency of proteid bodies normally present in their integral cells. 7. That when infection occurs it may be explained either by the excess of vigour of the bacterial products over the antidotal or protective proteids eliminated by the tissues, or to some cause that has interfered with the normal activity and production of these bodies by the tissues. 8. That phagocytosis, though frequently seen, is not essential to the existence of immunity, but is more probably a secondary process, the bacteria being taken up by the leucocytes only after having been rendered inert through the normal germicidal activity of the serum of the blood and other fluids of the body.

THE OUTBREAK OF ENTERIC FEVER IN LONDON.

IN a previous number we commented on the need for investigation, either by the Local Government Board or the London County Council, of the recent outbreak of enteric fever in South-east London. The disease had evidently invaded several districts, and under those circumstances it was obvious that the inquiry must be made by some person who could deal with the total area. We now learn that Dr. George Turner was already engaged upon this duty for the latter body, and we trust that it will not be long before the circumstances of this prevalence of a preventable disease are made public. Dr. Turner is especially well qualified to undertake work of this nature, and inasmuch as there is reason for thinking the investigation of this outbreak is complex and difficult, the London County Council is to be congratulated on the wisdom of its choice.

SUICIDE, ITS ALLEGED INCREASE, CAUSES, AND REMEDIES.

IT has been freely asserted, and we fear not without some foundation, that the frequency of suicide has markedly increased with our advance in civilisation. It naturally follows that we should seek to inquire what are the ordinary causes and inducements which lead to acts of self-destruction, how far these have of late come into greater prominence, and how best they have been, or may be, met and resisted. We shall not be wrong in stating that in a majority of instances weakness, physical or mental, or both, is the usual precursor of such acts. Among its various evidences, we may take mere despondency resulting from exhaustion in the struggle for existence to be on the whole certainly the least disgraceful. The failure of hope and of will are in this case indicative of mere nervous atrophy. The life seems already withered when it is plucked away

by the hand of a man more insane than sinning. Passion and pique are other inducements which by no means belong to the same category. Here the flaw is moral, and directly and solely selfish. We have also to consider the case in which despair has been engendered by remorse, and the victim seeks death rather than face detection. In each instance, however, and in others which might be quoted, we can clearly trace a failure of vital force as expressed in character. It cannot be doubted that there are circumstances in our time as compared with previous periods which certainly do not diminish but rather increase the tendencies to such failure. That faculty of growth which has characterised our century above most epochs, whether as regards population, education, or trade, must have, and has, accentuated the friction of life. Hence arises the nerve waste already mentioned and apparent more or less in all classes. Literature, on the other hand, has not been blameless, but, as if taking its keynote from the age, utters in many works of modern fiction, not the voice of a strong and patient morality, but, instead, the mocking echo of a sceptical expediency. Doubtless this has helped to mould unevenly the vexed life of many to whom self-satisfaction is the one great gain and its loss the one absolute failure which they refuse to survive. Only in clearer views, and, if not with lessened work-tension, at all events with firmer courage and faith in the providential and natural order in life's plan, can we look for that mental stability which is our best guarantee for its continuance.

ANTISEPSIS: PUERPERAL MORTALITY IN PARIS HOSPITALS.

OUR own correspondent in Paris last week gave interesting particulars confirmatory of the immense benefits conferred on parturient women by the application of antisepsis to obstetrics. We commend the account to the careful attention of our readers.[1] He says, out of 1340 women delivered in Prof. Tarnier's wards during the past academical year, only fourteen died, thus giving the very satisfactory mortality of 1 in 95, or 1·04 per cent. Eight years ago the mortality calculated on the same number of cases reached 2·50 per cent.; while, thirty years ago, one parturient out of eleven, or 9 per cent., died. These figures prove conclusively that modern methods of conducting labour are responsible for the saving, in his wards alone, of 100 valuable lives per annum. This is a very gratifying report of progress and advance, and perhaps our correspondent is right in thinking that the virtue of antisepsis can go no further. Puerperal fever is now unknown in the wards of M. Tarnier, whose memory goes back to a time when he witnessed five deaths in one day from puerperal peritonitis; but there is still room, perhaps, for better results if we may judge from the experience of some of our London lying-in hospitals. In one of these, during the years 1888 and 1889, there was but one death in 1272 successive deliveries.

THE PLACE OF METAPHYSICS IN MEDICINE.

IN an interesting address delivered before the Æsculapian Society a few weeks ago, Dr. Alexander Morison called attention to the importance of the mind in relation to the body as a cause of disease and as a therapeutic agent. He thought that the reaction from the ancient metaphysical view of medicine had been carried too far, and that the effect of the purely physical aspect of the routine practice of medicine was unfortunate, often leading the physician to consider that he had done all his duty if "he had punched, pummelled, and inspected the biped before him," and asked him regarding his diet and regimen, while leaving out of consideration entirely the mental life of the patient. This psychical investigation requires delicacy, discretion, and tact, but when made may elicit facts concerning the moral and mental nature of his patient of vast importance. All physicians and surgeons should be psychologists in so far that they may consider and minister to the "all-feeling and all-acting part" of an individual. Surgeons sometimes do not sufficiently regard this element in the preparation of their cases for operation, and in overlooking this their results are apt to be less satisfactory than they might be. The metaphysical aspect is of the greatest value to the general practitioner, especially in observing the first discoverable symptoms of mental disorder. Allied to the purely metaphysical view of medicine, DR. Morison drew attention to the diagnostic significance of the face in functional disorders, and commends it as a subject worthy of investigation; but in speaking of the facial and organic co-relation, he seems to be ignorant of the work of Professor Laycock of Edinburgh on physiognomical diagnosis, published thirty years ago. He emphasises the importance of medical psychology in helping towards a solution of the important problem which has exercised the ingenuity of thoughtful men in all ages—viz., the relation of the mind or mental force to matter; and justly remarks that we cannot be satisfied with the purely subjective speculations of the metaphysicians while regarding at their true value the material researches of the scientists respecting the localisation of brain function and mentalisation, and comes to the conclusion that it is to be feared that the organ, state, or condition which can entertain an idea of the absolute or infinite will never be completely disclosed to finite man. In concluding a most interesting and instructive lecture, he speaks of the necessity of fostering in patients the emotions of hope and confidence, urges the exercise of these as more useful and warrantable than the "brutal candour" sometimes displayed, recommends that the mental attitude of the patient should be carefully studied in all circumstances, and considers that the stimulus of hope and peace of mind should be as possible of inspiration by the educated physician as the prescription of mere drugs.

THE ASSISTANT SURGEONCY AT ST. THOMAS'S HOSPITAL.

THE Court of Governors of St. Thomas's Hospital met on the 16th inst., and adopted by a large majority (57 to 9 the recommendation of the Grand Committee to appoint Mr. W. H. Battle to the vacant office of assistant surgeon. Mr. C. A. Ballance was also elected fourth assistant surgeon. The hospital thus secures upon its staff two gentlemen of proved ability, and has recognised their relative claims to promotion in the most equitable way. "All's well that ends well," and we trust that the special and peculiar circumstances attending this election may now be allowed to pass into oblivion.

PUNCTURE THROUGH THE ORBIT.

DR. LAPLACE records in the *Chicago Medical News* recently a case which is of very great importance, and, so far at least as regards operative procedure, is probably unique. A boy of ten, while playing in the garden, fell on an old fencing foil. It penetrated the left orbit, but without injuring the eye. When first seen he was comatose, and the limbs on the right side and the face on the left were paralysed. The pulse was 140, the temperature 104·5°, and about the centre of the left orbital ridge was an incised wound a quarter of an inch wide, into which the handle of a Graefe knife sank for three inches and a half almost by its own weight. No spicules of bone were felt, so it was concluded that the foil had entered the sphenoidal fissure. The pupil was insensitive to light, and the conjunctiva was anæsthetic. Treatment

[1] THE LANCET, Dec. 12th, p. 1367.

by various means was tried, but without success, and at the end of thirteen days it was resolved to operate. Trephining was carried out, a disc of bone being removed in the left temporal region, which included portions of the squamous part of the temporal bone and a part of the sphenoid. The dura mater appeared congested. An improvised snare of platinum wire was inserted between the bone and the dura towards the cavernous groove, and about a teaspoonful of clot removed piecemeal. The trephine opening was then plugged with iodoform gauze, as considerable oozing had been set up, and a graduated compress put over it and secured with a tight bandage. The improvement after the operation was remarkable. Six months after it the patient had equal use of both lower limbs (the state of the arms is not mentioned), but anæsthesia of the eye remained, with internal strabismus, these effects no doubt resulting from injury to structures in the sphenoidal fissure. It is to be hoped that the improvement will continue until there is complete restoration of function, although, considering the whole history of the case, such a result can scarcely be expected.

THE SAFE ISOLATION OF SMALL-POX.

AN important step has been taken by the corporation of Bradford with a view to the isolation of cases of small-pox without risk of diffusing the disease to the community around. Bradford has always been a leader in the matter of the provision of infectious hospital accommodation, and the corporation have now added to their already excellent site an additional two and a half acres, on which they have erected a building designed by Messrs. Morley and Woodhouse, on the principles laid down by the Royal Commission on Fever and Small-pox Hospitals, and having for its object the destruction of all out-going air. Last week Dr. Barry of the Local Government Board, accompanied by Dr. Whitelegge, the county health officer, Dr. Evans and Dr. Joynt, made a series of experiments with a view of testing the efficiency of the building in the matter of the destruction of all infected air; and it is stated that, as soon as practicable, an official report will be issued on the subject. The building is practically an air-tight one, all the windows being fixed and without any means of opening. Fresh air is admitted by three shafts, and distributed over the building after having been warmed or not according to season; and before its exit it is collected in an extracting flue and conveyed through a powerful furnace with honeycombed fire-brick divisions, in which it is contended all organic matter will be destroyed. If the destructive power of the furnace is automatic, and if the contention is sustained as the result of the experiments made, a great difficulty in connexion with the isolation of small-pox will be removed.

THE ACARUS SACCHARI.

THE sugar insect is of interest to the physician, as it may possibly be that the large numbers found in raw sugar would make it injurious to the health of the consumer; and, moreover, there is a skin disease produced by handling unrefined sugar. The Acarus sacchari is an insect belonging to the order Arachnida (*Medical News*, Nov. 7th, 1891). Dr. Hassall was the first to call attention to the general occurrence of the parasite in raw sugar sold in London. According to Professor Cameron they were found in a living state in no fewer than sixty-nine out of seventy-two samples. He did not detect them in a single specimen of refined sugar. In an inferior sample of raw sugar he reports finding 500 of the organisms in ten grains of sugar. The acarus may be avoided by using only refined sugar; but even if they were eaten, it is doubtful whether they would do any harm. The disease known as grocers' itch, however, is undoubtedly due to the presence of this mite, which works its way under the skin, and produces symptoms identical with those produced by the common Acarus scabiei, and the remedies are the same for both. It is important to remember that grocers and handlers of sugar are liable to such a disease. Raw sugar is probably not sold in large cities at the present day; so that "psora" is a rare disease among grocers, but is found more commonly among refiners and handlers of raw sugar. These parasites multiply very rapidly, and Gerlach has computed that a single female would produce 1,500,000 progeny in three months. A microscopic examination of minute particles of scab shows them to be swarming with the old and young acari. Various parasiticides are employed to destroy them, the most common of which are mercuric chloride and sulphur. Three species of acari are found on sheep, and the "scab" is one of the most dreaded diseases of this domestic animal. Other species are found parasitic on the cat, dog, and swine. Horses, cattle, and birds are also infested, and quite a number of genera and species of these insects are known. A case is reported of a child playing in the leaves in a wood, who on returning home complained of pain in her arm. No attention was paid to it until the next day, when a raised tumour was noticed, a small portion protruding through the skin, apparently like a splinter of wood. The child was taken to a medical man, who, after considerable pain to the child and trouble to himself, extracted a species of Ixiodes nearly one-fourth of an inch long, of an oval form and brown mahogany colour, with a metallic spot, like silver bronze, centrally situated on the dorsal region. If the parasite had not been removed, dangerous results would probably have followed, although this species can hardly be classified as one of the human parasites.

EFFECT OF ALCOHOL ON THE KIDNEY.

DR. KARL GLASER has found (*Deutsch. Med. Woch.*, No. 43; Abstr. i. *Fortschr. d. Med.*, No. 22, 1891) that the temporary ingestion of alcohol produces an irritant effect on the kidneys, as shown by the examination of the urine of a number of healthy young men in whom, prior to taking the alcohol, the urine was free from albumen. He found that the urinary sediment contained leucocytes and tube casts, as well as large quantities of crystals of oxalates and uric acid. He found, also, that the effect of a single potation did not last beyond thirty-six hours, but continued excess in drinking has a cumulative action. Even moderate quantities of alcohol have some influence in increasing the number of leucocytes, casts, and fattily degenerated epithelia; still, two individuals who each consumed from three to four litres of beer daily were exceptional in showing no tube casts, and it is surmised that their kidneys had become habituated to the action of alcohol.

THE ABUSE OF INSURANCE OF INFANTS' LIVES.

IT is inevitable that a certain feeling of suspicion should attach to the present system of insuring children's lives against the expenses connected with death and burial. So long as human nature, with its vices and frailties, continues unchanged, so long will the temptation to abuse for selfish ends this intrinsically helpful provision remain in force. It must be obvious that the societies, under present arrangements, do justice neither to the public nor themselves in the matter. The sum insured is often greatly in excess of that which would fully suffice for the cost of decent interment. Much more should likewise be done than is now done to prove the fact that death has been of purely natural causation, and not accelerated by wilful purpose or default. We cannot doubt that these associations accept the fact of death far too readily as a claim for payment, and we would

strongly impress the necessity of making full inquiry as to all preceding conditions before the burial allowance is granted, the discovery of cruelty or neglect being held to disqualify from receipt of payment. Some reduction in the amount of claims appears also reasonable. This ought, in our opinion, to exceed but little, if at all, the bare cost of burial. That of mourning is, after all, quite a secondary matter.

INFLUENZA.

So far as can be ascertained, the outbreak of influenza at Edinburgh seems to have been far more severe than that at Glasgow, and to have lasted a longer time. Indeed, cases are still occurring in the former city, where the death-rate reached last week the high figure of 43 per 1000. In the neighbouring town of Leith the rate rose to 40·8 per 1000. The disease is also spreading rapidly in Belfast. In London, happily, as intimated last week, there is no marked indication of its assuming a severe type, the deaths primarily attributed to it last week being 8, as compared with 13 and 9 in the preceding two weeks. It is, however, reported that there is a severe outbreak of influenza among horses in the south-east of London. The general death-rate continues to be high at Newcastle-on-Tyne (36·4), Sunderland (31·4), Wolverhampton (40·9), Plymouth (45·1), and Cardiff (33·2). On the Continent influenza seems to be on the decline in Germany, but it is very prevalent in Denmark and Holland, whilst at St. Petersburg the type is especially severe, and characterised by violent mental disturbance. The occurrence of cases at Gibraltar after the arrival of regiments from England affords a timely commentary on the enforcement of quarantine regulations in the case of the s.s. *Massilia*, as noted by Mr. Low in our columns this week. Influenza also appears to be gaining a foothold in the United States, in California, as well as at New York, Denver, St. Louis, and other parts.

THE SIMULATION OF HÆMOPHILIA.

PROF. UNVERRICHT introduced to the medical faculty of Dorpat at a recent meeting, a patient who for several months past had suffered from severe bleeding from the ears, nose, and eyes. When blood was first discharged from the right ear, the sense of hearing had also become dull on the same side, and the whole right side of the body was paralysed, hemianæsthesia and hemianopsy being also present. Her medical attendant certified that the right eye could distinguish nothing. About a fortnight afterwards similar symptoms appeared on the left side, and an impediment of speech was observed. Since then she had been completely blind. The paralysis and the dulness of hearing on the left side improved a little, but all other symptoms were still present when she was admitted to the clinic. While under treatment there she also suffered frequently from hæmaturia. When the patient on one occasion declared she had voided bloody urine, she was put under the influence of chloroform, and then catheterised, when perfectly normal urine was drawn off. At the same time, a large needle was discovered in her hand, which until then she had been adroit enough to conceal, and which was evidently the cause of self-inflicted wounds and the consequent bleeding from eyes and ears. The needle was put back into her hand before she recovered consciousness. A short time afterwards another bleeding from the ear occurred, but this time the puncture of a needle was plainly visible in the external meatus. Careful examination furthermore resulted in finding that the patient was neither perfectly blind nor deaf with the right ear. It was remarkable that when asked to point at a lighted candle which was placed before her she would first for some time wave her hand aimlessly in the air, and then approaching the light, allow her hand to be singed without moving a muscle. Occasional reflex motions of the lids when the hand approached the light quickly, and several other tests, demonstrated, however, conclusively that the patient could see. Professor Unverricht added to his report on the case his opinion that voluntary bleeding from skin, ears, and eyes—which recognised authorities like Jolly and Strümpell consider genuine—is always due to more or less clever simulation, and he believes that the cause of the bleeding will be found if persistently looked for.

A CENTRAL MORTUARY IN LONDON.

THE London County Council has recently had before it the report of its Sanitary and Special Purposes Committee on the subject of a central mortuary for London. Last year the power to make this provision was conferred on the Council by its General Powers Act of that year. Evidence was given before the Select Committee, to which the Council's Bill was referred, that the public had suffered much inconvenience at the time of the loss of the *Princess Alice* through the absence of any central mortuary to which the unidentified dead could be removed. Recently the chairman of the Sanitary Committee, Dr. Gibson Bott, and the medical officer, Mr. Shirley Murphy, visited Paris and made inquiry into the method in use in the Morgue for preserving the dead for long periods. The Paris system is regarded as sufficiently satisfactory to be deserving of imitation, and the coroners of London having supported the proposal, the Council will, we presume, shortly be asked to vote the supplies necessary for the institution of a somewhat similar mortuary for London. The report presented to the Council states that the number of unclaimed dead in Paris before bodies were preserved for long periods was over 30 per cent., but now it has fallen to 5 per cent. In London, however, at the present time the number of dead finally unidentified is less than 5 per cent. It is therefore impossible to say how far this proportion will be diminished by the institution in London of a mortuary such as that proposed.

THE LACTIC ACID TREATMENT OF DIARRHŒA.

IN a number of cases of diarrhœa due to various causes, including phthisis, typhoid fever, erysipelas, and intestinal catarrh, which Dr. Shchegoleff, according to a paper he has published in the *Meditsinskoe Obozrênie*, treated by means of lactic acid, a successful result was obtained in two days in fifteen, in three days in five, and in four days in three. In twelve cases of exanthematous typhus the treatment failed to have effect, but in thirteen others it was successful. The preparation used was an aqueous solution sweetened with syrup. In this form the drug was well tolerated, and no unpleasant symptoms were produced. The quantity of lactic acid given per diem averaged about 115 grains, or little more than half that given by M. Hayem, who first recommended this treatment, and this may perhaps account for some of the failures of the Russian practitioner. Acting on the advice of the latter, Dr. Chernisheff, who has also published an account of his cases, prescribed lactic acid in three cases of acute intestinal catarrh, in six of chronic gastro-intestinal catarrh, also in eight of diarrhœa due to phthisis, and in three of diarrhœa complicating Bright's disease. In all these cases good, sometimes striking, results were obtained. Thus several cases of simple catarrhal diarrhœa were relieved in from two to five days. In six cases of non-specific diarrhœa in phthisical persons the diarrhœa ceased the day after the commencement of the treatment. In one case of chronic gastro-intestinal catarrh the diarrhœa ceased on the third day from the commencement of the lactic acid treatment, but reappeared when it was stopped.

Two days more of the treatment served to effect a more permanent cure. Notwithstanding the observations of MM. Hayem and Lesage on the value of lactic acid in the diarrhœa with green stools of young children (see THE LANCET, vol. i. 1887, p. 1149, and vol. ii. 1887, p. 1020), according to whom lactic acid destroys the bacillus on which the condition depends, this medicament is rarely used, and, indeed, is not generally known to have any effect on infantile or other diarrhœa.

WIRING THE SPINOUS PROCESSES IN POTT'S DISEASE.

THIS procedure is recommended by Dr. Hadra of Chicago as a means of securing immobility of the spine in diseased conditions. Dr. Hadra used it once as a means of fixing a fractured spine, and he now recommends it as worthy of a trial in other diseased conditions in which it is desirable to secure the spinal column in a condition of rest. In this way he thinks the vertebral bodies will be prevented from pressing on each other, and so it may possibly prevent permanent deformity. If, however, an abscess cavity has already formed, the surgeon will have to decide whether it is too large to be filled up by new bone formation. If it is, it had better be left alone. Of course the difficulty will be not only to discover whether there is a large abscess cavity, but whether there is one at all. The operation, however, seems to be a simple one, and it does not exclude other and subsequent means of relief. It is carried out as follows: A median skin incision is made over the prominent spinous processes; the long muscles on either side are incised longitudinally, and retracted sufficiently to allow of a good view of the outlines of the spines; then the silver wire is carried on a strong needle through the interspinous spaces above and below the processes as often as is deemed necessary, and the ends of the wire twisted. In lumbar operations, simple instead of figure-of-eight loops are sufficient, as the processes stand out almost horizontally. The operation is not difficult, and with careful asepsis should be without danger, and it may be found to be an important aid in securing the physiological rest so necessary in these cases.

THE TREATMENT OF SCLEROSIS OF THE MIDDLE EAR.

DR. LOEWENBERG publishes in the *Deutsche Medicinische Wochenschrift* a contribution to the treatment of sclerosis of the middle ear. While fully acknowledging the good effect of inflating the drum with air or vapours in catarrh or puriform inflammation of the middle ear, though denying the importance of occasional distensions of the sound conducting apparatus during the treatment, he advises the avoidance of immoderate pressure or of undue interference with the proper balance of the various parts of the organ in the treatment of sclerosis. He recommends the exclusive use of the catheter, which admits of a free regulation of pressure. The patient must at the same time hermetically close the ear with his finger, and so decrease the tension of the drum outwards. In cases where it is necessary to allow the patient to treat himself, he should also himself apply Politzer's method, as he can best obtain by practice a knowledge of the necessary pressure. He must, however, get another person to close his ears during the inflation, unless an apparatus is used which Dr. Loewenberg himself constructed in the year 1884. It consists of a ball, with one or two tubes having olive-shaped ends, which fit tightly into one or both meatus. In discussing the choice of remedies to be introduced by means of the catheter, he utters a warning both against the moist vapours of water and other fluids, and against the dry vapour of iodine. He considers the cold vapour of iodine, mixed with atmospheric air, valuable. This may be guided into the ball by aspiration from a bottle containing crystals of iodine. Dr. Loewenberg also found the vapour of bromide of ethyl especially useful in cases of subjective noises. In conclusion, he calls attention to a symptom which he observed so regularly that he depends on its diagnostic and prognostic value. Patients suffering from sclerosis have a sense of warmth, and even complain of a feeling of burning during the inflation of the vapours of ether, chloroform, or bromide of ethyl; while those who suffer from other diseases of the ear have, on the contrary, a sense of cold during the administration of these remedies.

ENTERIC FEVER IN ROTHERHAM AND RAWMARSH.

IN the interests of the consumers of the water supplied to Rawmarsh and other places as well as to their own borough by the Rotherham corporation, we very much regret the attitude adopted by the chairman of the Health Committee in dealing with the recent serious prevalence of enteric fever which has had its special incidence on consumers of that water-supply. Dr. Picken performed his obvious duty when he pointed to the relation existing between the use of that water and the prevalence of the disease; he served Rotherham, equally with Rawmarsh, when he pointed out the grave defects attaching to that water-service by reason of the sewage and excremental filth to which it was exposed; and even chemical analysis, which can admittedly not speak of safety and wholesomeness as to water, bore out his views, for the results obtained by the county analyst were suspicious in the extreme. And yet the chairman refers to all this as "trailing a red herring across the path in order that he [Dr. Picken] might detract from what was the real cause." One of the most significant points in the reports and speeches of those who profess not to believe in water-pollution as a cause of this epidemic has been their utter inability to suggest any other intelligent explanation of the marked peculiarities of its incidence. It is nothing that one chemist should find no chemical evidence of pollution of an individual sample, especially when it is remembered that the albuminoid process, when applied to water deliberately polluted with a filtrate of typhoid evacuations, once led to the sample being classed as of "extraordinary organic purity." Even if chemistry had the power of detecting disease organisms, many a sample might be taken from a reservoir in which the typhoid poison was present without any morbid particles being included, but that would be no proof that other samples might not contain them. For the credit of Rotherham, and in the interests of the consumers of this water, it is sincerely to be hoped that, whatever may be said on the subject, the action taken will be on the lines indicated by Dr. Picken.

CEREBRO-SPINAL SCLEROSIS AND THE ACUTE SPECIFIC FEVERS.

IN an article in the *Correspondenz Blatt für Schweizer Aerzte*, of which an abstract appears in a recent number of the *Centralblatt für Klinische Medizin*, Dr. Nolda directs attention to the occurrence of cerebro-spinal sclerosis in children and the relation which it bears to acute infectious disease. The disease as it appears in children does not differ materially from that in adults, except that symptoms come on more quickly and that it runs a more rapid course. Out of seven cases to which he refers, in six the onset of the condition was preceded by an acute infectious disease, and in five of them the first symptoms had manifested themselves so soon after the acute illness that it is reasonable to conclude that they depended upon it. In the sixth case the onset of the symptoms of sclerosis was not evident until several months after the acute illness. In only one case of the seven did the onset

of the condition seem to be quite independent of an acute specific disease. The disease to which the sclerosis seemed to be in some close way related was in three cases diphtheria, in two cases scarlet fever, and in one case pneumonia. The author believes from these data that cerebro-spinal sclerosis in children is an after-effect, in most cases, of an acute specific fever; and from the fact that it occurs among the children of the poor he is inclined to think that it is closely connected with a want of care during convalescence Although he has not seen an instance of the disease following influenza in a child, it is, he says, to be feared that the reason for this is not that the disease has no such sequela, but that sufficient time has not yet elapsed for the various symptoms to have developed sufficiently to be recognised as manifestations of this disease.

CERTIFICATES OF POSTPONEMENT OF VACCINATION.

A SOMEWHAT curious discussion took place at a recent meeting of the Kings-Norton board of guardians on a statement that, whereas the public vaccinator only postponed 3·74 per cent. of his cases on the ground of medical unfitness for vaccination, the private practitioners postponed no less than 36·2 per cent. The Vaccination Committee having inquired into the subject, and having communicated with a number of the private practitioners in question, reported to their board that this discrepancy had been satisfactorily explained. The answers are, in consequence, of some interest. One is that children are principally submitted to public vaccinators for vaccination purposes only, but that medical men are called in as private practitioners in the case of infantile ailments, and that it is under these circumstances that many certificates of unfitness are given. Another answer states that the children of the labouring classes are, as a rule, healthier than those of the upper classes.

MEDIASTINO-PERICARDITIS IN CHILDREN.

DR. HENRY ASHBY puts on record (*Medical Chronicle*, Dec. 1891) two cases of mediastino-pericarditis in children, aged two years and seven years respectively. The cases illustrate strikingly the grave interference with the functions of circulation and respiration which this condition entails. Dr. Ashby points out that inflammation of the lax cellular tissue of the mediastinum may arise from inflammatory processes in the bronchial glands, lungs, or pleura, and that the pericardium is almost always implicated, either primarily or secondarily. The consequent matting together of the important structures in these regions must necessarily seriously impair the free action of the heart, obstruct the venous flow, and diminish the arterial pulse. Hence, among the effects of mediastino-pericarditis, œdema, ascites, and chronic hepatic congestion are prominent. Clinically, the initiatory symptoms, he says, are often overlooked; there may be a history of measles or bronchitis, cough, and pain in the chest, and perhaps pericardial friction can be detected; but, as a rule, the child is first seen for ascites, for the existence of which it is difficult to account, and associated with which the liver may be found to be enlarged. In the more chronic cases cirrhosis may be suspected; but eventually general dropsy supervenes, and examination of the chest will show an increased area of dulness in the sternal region and front of the chest, provided that the anterior margins of the lungs are involved in the adhesions. The effect of deep inspiration in weakening or even obliterating the pulse, upon which stress is laid by some writers, is not always present. It was not observed in the two cases that Dr. Ashby reports. The condition is, therefore, one which may easily be overlooked; but it may be well to bear its characters in mind in the presence of cases of ascites with hepatic enlargement in young children.

RESULTS OF EXTIRPATION OF THE LIVER.

IN a preliminary note,[1] Dr. von Meister confirms from his own experimental observations some of the results previously obtained by Ponfick of the remarkable degree of reparative power exhibited by the liver, and applicable doubtless to other glands in greater or less degree. Thus he finds that in the dog and cat, as well as in the rabbit, the removal of more than three-fourths of that organ is not followed by any serious consequences, and that within the space of thirty-six days repair has advanced to such an extent that the weight of the organ is regained. This regeneration is effected partly by hypertrophy of the hepatic cells, but mainly by their hyperplasia; but new lobules are not formed, and biliary ducts as well as bloodvessels share in the new formation. Observations were also made upon the effect of extirpation of such large portions of the liver upon the excretion of urea. It was found that the total quantity of nitrogen notably diminishes, but not in proportion to the nitrogen of the urea, so that the proportion of the latter to the whole nitrogenous excretion is decreased. On the other hand, the amount of extractive matters is increased, and their nitrogenous constituents appear in greater proportion than normal to the total nitrogen. The diminution in urea is proportionate to the amount of liver substance removed, total extirpation of the organ leading to a very marked decrease in urea. It was farther found that after partial extirpation—within a period of from eleven to fifteen days—the quantity of urea rises until it once more attains the normal degree.

FOREIGN UNIVERSITY INTELLIGENCE.

Basle.—Dr. Michael Lenhossek has been appointed Extraordinary Professor of Anatomy.

Constantinople.—Dr. Haïreddine Bey has been appointed to the chair of Surgery, in succession to Dr. Naïm Bey, deceased.

Havana.—Dr. Manuel J. y Larralde has been selected, after competition, as Professor of Organic Chemistry.

Madrid.—The Professorship of the History of Medicine—a subject which is obligatory for all candidates for the Doctorate—has at last been filled up by the appointment of the Professor of General Pathology in the Medical Faculty of Granada.

Paris.—In consequence of the retirement of MM. Dumontpallier and Cadet de Gassicourt the following changes will occur in the hospital staffs:—M. Cornil goes from the Charité to the Hôtel Dieu; M. Moizard from the Tenon to the Trousseau; M. Bouchard from the Lariboisière to the Charité; M. Troisier from the Pitié to the Lariboisière; M. Faisans from the Tenon to the Pitié; M. Barié from the Hospice des Ménages to the Tenon; M. Comby from Sainte-Périne to the Tenon; and M. Lépine from Bureau Central to Sainte-Périne.

Turin.—Dr. Motta has been recognised as *privat docent* in Orthopædic Surgery, and Dr. Salvioli as *privat-docent* in General Pathology.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. Gustav Leuschner, Medical Privy Councillor of Berlin, in his seventy-ninth year, from the sequelæ of influenza.—Dr. Johann Ignaz Hoppe, Professor of Medicine in Basle,

[1] Centralbl. f. Allg. Path. u. Path. Anat., No. 23.

at the age of eighty. He had been a voluminous writer, not only on medical topics, but on physics and metaphysics. The deceased was a very remarkable man, and the most astonishing anecdotes—many of them doubtless highly coloured by the imagination—are current about him among the public of Basle and of Barmen, where he practised in his earlier days.

GENOA has long been in need of a hospital commensurate with the importance of her medical school, and this she has, in great part, acquired in the medical wards of her Policlinico, which were opened with due ceremony on the 13th, the first centenary of her Scuola di Medicina Pratica. Professor Maragliano, physician-in-chief and consultant to the Policlinico, was the spokesman of the occasion, and—as secretary of the International Medical Congress, which meets at Rome in 1893—anticipated the pleasure of showing such of its foreign members as may return *viâ* Genoa that "in point of completeness" the institution just opened has no superior in Italy or even in Europe.

WE regret to announce the death of Sir James Risdon Bennett, M.D., at the age of eighty-two years. He graduated in Edinburgh in 1833, and was afterwards appointed lecturer at Charing-cross Hospital. He became Fellow of the College of Physicians in 1846, and was elected President in 1876. In addition to his connexion with St. Thomas's Hospital, he was physician to the City of London Hospital for Diseases of the Chest. He had been a member of the General Medical Council and of the Hospital Sunday Fund Committee. He received the honour of knighthood in 1881. We reserve for a future number a sketch of the life and work of this distinguished physician.

DR. JOHN MINTER, Inspector-General of Hospitals and honorary physician to the Queen, died at Plympton on Wednesday, in his seventy-sixth year. The deceased officer, who retired in 1875, entered the navy in 1837, and, as assistant surgeon of the *Implacable*, served on the coast of Syria in the operations of 1840. Dr. Minter was promoted Deputy Inspector-General in 1859, and Inspector-General in 1872.

WE publish in another column the terms of the Royal Warrant, just promulgated, by which the substantive ranks and the rules for the promotion and precedence of medical officers in H.M. Indian military forces are modified so as to bring them into accord with the regulations in the British Medical Service.

AN election to the Linacre Professorship of Human and Comparative Anatomy, vacant by the death of the late Professor Moseley, will be holden at the house of the President of the Royal College of Physicians (Sir A. Clark), Cavendish-square, W., on Monday next, at 3 o'clock.

WE regret to learn that Dr. Diplock, who has for many years served the office of coroner for West Middlesex, is suffering from cancer of the tongue.

Pharmacology and Therapeutics.

NAPHTHALIN AS AN ANTHELMINTIC.

DR. MIROWICZ, writing in the *Russkaya Meditsina*, recommends naphthalin as an anthelmintic, and points out that all other anthelmintics contain an uncertain percentage of the active ethereal oils, and are consequently not to be depended on for their chief effect. They also incidentally disturb the digestion by the necessity of taking large doses, and some remedies—as, for instance, santonin—may in such large doses have a general toxic effect. Dr. Mirowicz, who believes he is the first to use naphthalin as an anthelmintic, claims for it, not merely that from its very character it excludes the possibility of all untoward symptoms, but that it is also perfectly reliable in its anthelmintic properties. He has administered it against all kinds of intestinal worms, and invariably obtained prompt results. Threadworms and tapeworms, the latter in their entirety, were removed by a single dose of one gramme of naphthalin. Adults are ordered a dose of castor oil afterwards, but for children it is best to give both the naphthalin and the oil together. Though, of course, naphthalin has not come into common use as an anthelmintic, Dr. Mirowicz is mistaken in thinking that he is the first to employ it in that way, as it is now some years since another Russian practitioner, Dr. Coriander of Samarcand, published the fact of its value both in tænia and ascarides. He gave two or three grains twice a day to young children. For adults the dose was from eight to twenty grains, mixed with sugar.[1]

AN ITALIAN REMEDY FOR PHTHISIS.

Monochloraphenol, which was prepared by Signor Tacchini, a chemist in Pavia, has been employed in the treatment of phthisis by Dr. Passerini of Casate-Nuovo with great success. It is used as an inhalation, and being a powerful antiseptic like trichlorophenol, but much less irritating, and being besides exceedingly volatile, it is capable of penetrating deeply into the lungs, and it is thought that it may act directly on the tuberculous foci themselves. These inhalations may be continued for a long period, and are said to cause the bacilli to diminish and even to disappear from the sputa, and to occasion a most marked improvement in the symptoms. In five cases of an early stage of phthisis complete recovery is said to have ensued after two months' treatment, and no recurrence of the symptoms to have taken place in the six months that have subsequently elapsed.

STROPHANTHUS COMBINED WITH IRON.

Dr. Ludwig Váczi of Nagy-Karoly recommends that in certain cases of chronic anæmia iron should be administered in the form of Blaud's pills, tincture of strophanthus being given at the same time. The cases suitable for this treatment are, according to him, those in which, after long and uninterrupted administration of iron, the patients complain of indigestion, nervousness, palpitation, congestion, and insomnia, and it becomes necessary to interdict the further use of iron for some time, even at the risk of increasing the anæmia. Such cases are chiefly those of chronic anæmia in females; and Dr. Váczi declares that he has found his new mode of treatment to answer well in several severe cases of anæmia after flooding.

PEROXIDE OF HYDROGEN IN THE TREATMENT OF PURIFORM CAVITIES AND OF FISTULA.

Dr. H. Graff, a military surgeon of Christiania, publishes in the *Norsk Magazine* the result of his experience of peroxide of hydrogen in the treatment of abscesses which do not admit of being laid completely open so as to subject them to antiseptic treatment, and of fistulous sinuses offering the same difficulty. The author recommends, in preference to all other antiseptic fluids, irrigation with a fifteen-volume solution of peroxide of hydrogen, which he employed with the greatest success at the Royal Hospital of Christiania. The great development of gas which takes place in consequence of the decomposition of the peroxide when coming in contact with blood or pus removes the pus very effectually. The irrigation, followed by proper antiseptic dressing, causes a considerable decrease of the discharge, and healing takes place in a remarkably short time. In the case of cachectic patients, when granulation is slow, Dr. Graff recommends that the irrigation should be occasionally changed for injections of equal parts of balsam of Peru and ether. The treatment is especially valuable in cases of indurated wounds with puriform cavities. It is, of course, necessary to make due provision for rapid and free drainage, as the development of much gas may otherwise produce serious pressure.

[1] See THE LANCET, Sept. 4th, 1885.

MEXBOROUGH INFIRMARY.—On Monday an additional wing was formally opened at this institution by Miss Montagu, niece to Mr. A. Montagu, of Ingmanthorpe Hall, who gave the building.

REPORT OF

The Lancet Sanitary Commission

ON THE

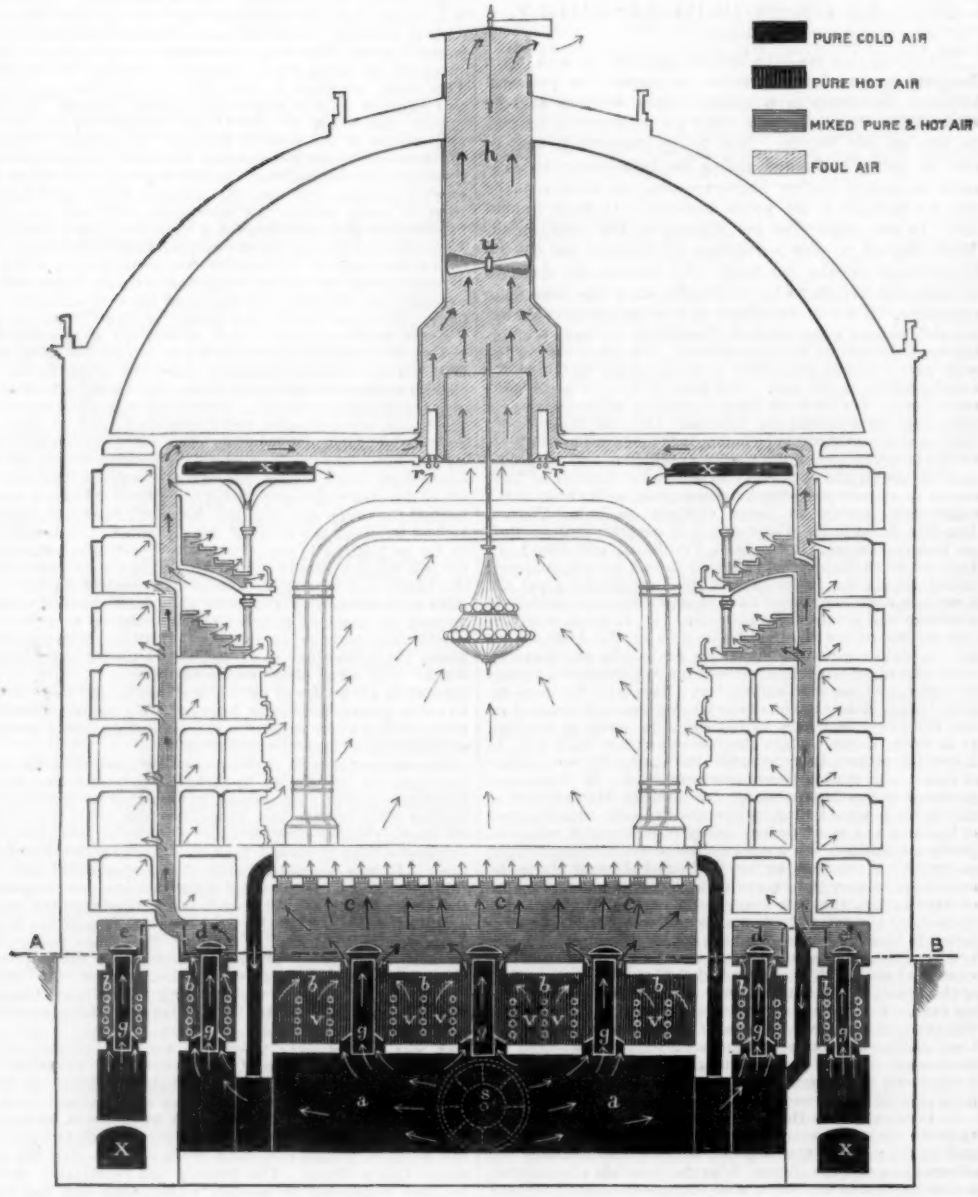
VENTILATION OF THEATRES AND PLACES OF PUBLIC ASSEMBLY.

FOR a long time we have been accustomed to look upon England as the leading nation in respect to practical hygiene. Speaking in a general sense, we may still be entitled to hold this position; but we must not be content to rest on our laurels. Not to go forward is apt to end in going back, and unless we take energetic measures to secure further improvements, we shall soon be left far behind in the noble endeavour to save human life. In one respect we are already in the background. With respect to the ventilation of theatres we can no longer hope to take the lead. All that we can do is to imitate, and at best to improve upon, what has been done elsewhere. Nor can we afford to lose any further time if we wish to save what shred of reputation we have remaining in this phase of sanitary science. Formerly we led the way, now let us at least seek to follow those who have far outstepped us in the race. The time is ripe for some such endeavour. We have at least something approaching to a municipal government for London. On the other hand, new theatres are about to be built. Is it too much to ask that, by the intervention of the public authorities and of public opinion, we should endeavour to secure for London at least one or two theatres worthy to be compared with those which exist, not merely in large capitals such as Vienna, Brussels, Buda-Pesth, Geneva, but in smaller centres, such as Gratz, Munich, Rotterdam, Frankfort, and Nice? In London, more than in continental towns, we are supposed to understand the importance of good ventilation; yet the towns we have mentioned have theatres that are models of scientific and successful ventilation. In London, with the best paying public of at least this side of the Atlantic, we are content to continue breathing foul air in our theatres, and suffer night after night either from dangerous and violent draughts, or from semi-suffocation. This is all the more deplorable as, after all, the modern improvements realised on the Continent originate in the example given in London. It is to M. Emile Trélat's English experience that may, in a great measure, be attributed the successful ventilation of theatres in the towns we have mentioned. M. Trélat was professor at the Conservatoire des Arts et Métiers and at the Special School of Architecture in Paris. He was one of the first and most ardent teachers of hygiene, which he justly maintained was a science that every architect ought to study. A student under Paclé and General Morin, he soon went further than these earlier masters in the science of ventilation, the fact being—and on this M. Trélat insists—that the scientific discoveries on which modern ventilation is based had not then been made. To put the matter briefly, General Morin's object was to supply a sufficient volume of air. M. Trélat now insists that this is only a part of the problem. It is not merely quantity but quality that we need. For instance, in the ventilation of the Chatelet Theatre and the Grand Opera of Paris—and these are the best-ventilated theatres of Paris—we have the warmed air discharged directly into the theatre, without any thought being given to the fact that its necessary qualities may have been injured by the process of warming.

In London, at the Houses of Parliament, M. Trélat found that the air was treated first; it was filtered, moistened, and mixed with air that had not been warmed before it was allowed to enter the House. Also the principle of admitting a slow current of air over a wide surface was practised, and the employment of mechanical force to produce the current was acknowledged to be indispensable. Inspired by this example, M. Trélat pushed forward energetically the work of propaganda. As far back as 1860 we find him active in the task. He then calculated the average duration of theatrical performances, the average number of spectators, and compared this with the number of the population of Paris. This brought him to the conclusion that, out of 213 hours, each member of the Parisian population spends one hour in a theatre. But the average is far short of the actual amount of suffering entailed on those who frequent theatres. The quantity of foul air breathed in theatres is so considerable as to become an important factor in the maintenance, or rather in the destruction, of the public health. M. Trélat, therefore, urged that theatres should be specially surveyed and designed so that they might be easy of access and easy to ventilate. The centre of a square naturally suggests itself as the best place for such a building. In most cases theatres are cramped for want of room. The stage is not deep enough; there is not space at the sides for conveniently shifting the scenery. This want of room is the cause of frequent accidents, and injuries to the scene-shifters and others. In this respect the stage of the Grand Theatre of St. Petersburg is one of the best in Europe. In ordinary theatres the want of space necessitates the crowding of the seats together, ventilation becomes more and more difficult as the crush is greater, and also the struggle to get past narrow rows of seats makes the spectators reluctant to retire between the acts and breathe a little fresh air in the open. As for the ventilation, where provided, it is often useless. So far back as 1860 M. Trélat published a pamphlet in which he denounced the ventilation of the Grand Opera, Paris, where, nevertheless, 100,000 cubic metres of air were extracted per hour. This was equal to a supply of 50 cubic metres per hour to each spectator; and if the air only circulated among the spectators, it would have been more than enough. But the air travelled straight from the stage up to the extract shaft above the grand lustre, and barely a tenth part of it reached the audience. This is not only disastrous from the health point of view, but it greatly interferes with the acoustic qualities of a theatre. The voice travels with the air currents, and the best place for hearing would be the ventilating shaft above the lustre; anyone perched up above the lustre, though very far away from the stage, would hear, if anything, too well; for he would hear not only the actors, but even the voice of the prompter. Undoubtedly, so far as hearing is concerned, the best method would be to close the aperture in the ceiling of the theatre, to abolish the lustre and give light through the panes of a glass roof. Also with electricity the need of a lustre and a central up-cast air shaft in a great measure ceases to exist. It would then, perhaps, be possible to ventilate from the stage across the auditorium to extract shafts placed opposite the stage. The sound of the voices would then be borne on the current of air produced by the ventilation, and there would be much greater facility in hearing. We are not, however, aware of any other reason for recommending such a method of horizontal or lateral ventilation.

For many years M. Trélat went on preaching the new doctrines on ventilation to unheeding pupils and to an indifferent public. It seemed in vain that he protested, in lecture after lecture and year after year, against pumping air through shafts direct into the place to be ventilated, and demanded that it should first be diffused under the entire floor. It was no use arguing that superheated air was injurious, and must be mixed with pure air and reduced to the proper temperature before it is admitted into the room, hall, or theatre. The eloquence and other qualities which have rendered M. Trélat one of the most fascinating lecturers in Europe, all seemed lost when dealing with the vexed problem of ventilation. After ten years' uphill and apparently useless work, the Franco-German War broke out, and all M. Trélat's teaching appeared to be forgotten, and lost in a sea of blood. But the war was hardly over when the work of reconstruction began. The Austrian Government had organised a Universal Exhibition, which was held at Vienna in 1873. The French Government sent some of its ablest men to report on the Exhibition, and see what could be learnt. M. Trélat formed part of a deputation of French technicians, and when in Vienna they were all invited to visit the new Grand Opera House. The heating and ventilation of this building were said to be very remarkable, and had been arranged by Dr. Böhm, the medical director of the Rudolfstiftung Hospital. M. Trélat arrived late; most of the building had already been inspected when he joined the party; but as soon as he made his appearance several of his colleagues shouted excitedly to him to come and see this and that and the other, all of which were practical applications of his long preached theories. On hearing M. Trélat's name mentioned, Dr.

THE GRAND OPERA OF VIENNA.



a, Chamber for the arrival of the pure cold air. *b*, Chamber where the pure air is warmed by the steam coils. *c*, Chamber where the pure cold and the pure heated air are mixed together. *d d* Ditto, ditto, for the supply to the passages. *e e*, Ditto, ditto, for the supply to the amphitheatres. *g g g*, Shafts to convey the cold pure air to the mixing chambers. A, Exhaust shaft for the foul air. *r r*, Reflectors with burners, serving for extra exhaust ventilation from the amphitheatres and passages. *s*, The inlet propelling fan. *u*, The outlet exhaust fan. V V, The steam coils for warming. X X, Shafts for inlet of extra supply of pure cold air during hot weather.

Böhm at once stepped forward and asked to be introduced. Then, in energetic language and grateful terms, Dr. Böhm said he was anxious to publicly acknowledge that whatever success had attended his efforts to provide good and scientific ventilation was entirely due to M. Trélat's teaching. Here, in a foreign land, the latter had found the full realisation of his theories. In one of the finest theatres of Europe the truth of his teaching had been vindicated; and this without his knowledge, and while he was thinking that no one had listened to what he had preached. The meeting of M. Trélat and Dr. Böhm, somewhere high up in the garrets of the Vienna Grand Opera House, is an event which will constitute a landmark in the history of ventilation.

The Grand Opera House of Vienna, though the first, still remains the best example of the application of the new principles of ventilation. The last application of these principles will be found in the Amphitheatre of the New Sorbonne at Paris. These, the first and the last, are the best specimens, and will serve to fully illustrate what has, can, and should be done. Taking the Grand Opera House of Vienna first. This is a building which will hold 2700 spectators, and measures 397 feet by 299 feet. There are four galleries and ninety-two private boxes. These figures are sufficient to convey some idea of the vast dimensions and the importance of this theatre. The air is propelled into the theatre by a fan, of helix form, which measures 11.5 feet in diameter externally; and when made to revolve at the highest speed can propel forward 3,531,658 cubic feet of air in an hour. But, as a rule, the amount of air actually set in motion is not more than from 2,825,324 to 3,001,907 cubic feet. This is equal to a supply of 1059 cubic feet per head per hour. The fresh, cold, outside air drawn into the building by this powerful apparatus reaches the lowest of the three floors built underneath the theatre for ventilating purposes. Here we have a somewhat startling proposed obligation, which is nevertheless very important and not so impracticable as it may seem at first sight. Whatever devices and contrivances may, with more or less success, have been employed to avoid this obligation, still, to manage well and easily, we want three separate floors under the building it is desired to ventilate. This, as seen by the accompanying section, is what exists at Vienna. The first or lower floor is the receiving-room for the fresh air. Here the space, about the same size as the floor of the theatre, is filled with cold, pure air. In the ceiling are double openings. One set of openings leads to the floor immediately above, the second set of openings gives into shafts that open out into the third, or upper floor. In the middle floor are the heating apparatus, consisting, in this case, of 59,058 ft. of iron tubing an inch thick, which contains steam at a pressure of five atmospheres. The air placed in connexion with this tubing is very quickly warmed. If, according to the old practice, this air were discharged direct into the theatre, it would enter in hot, unwholesome gusts. But we now come to the third and most important floor, which may be called the mixing room. Here the attendants stand and, as it were, steer the ship, for there is a great resemblance between navigation and ventilation. With every change of weather and every gust of wind we must be ready to "luff" or to "keep her head more to the wind." So the ventilation-regulator must have thoroughly under his control the hot and the cold air which he admits in varying quantities into the body of the theatre. It is no shirking the difficulty; we must have in the mixing room a captain and an intelligent crew. From every part of the theatre there are telegraph wires running to the captain's cabin and keeping him informed during the whole time of the performance what is the state of the temperature in the various parts of the building. It will be seen that separate shafts are provided for the galleries and the passages outside, so that the air supplied to these parts may differ in degree of heat from that which is given in the centre of the theatre. Indeed, good ventilation demands that the air in the passages round the theatre shall always be warmer than the air inside. Thus, if a door is opened the current of air will be from the theatre into the passage, and not, as is generally the case, from the passage into the theatre. In this respect the boxes at the Vienna Theatre are not so well provided. They are furnished with air from the passage by openings under the doors; therefore the ventilation, though good, is not so satisfactory as in the stalls or pit. The supply of air to the passages running behind the boxes is very plentiful, the air is carefully mixed, its temperature accurately watched. The section shows that there are on each side two separate sets of three superposed chambers for mixing and warming the air. One set of chambers feeds a shaft which supplies air to all the passages, and from these passages to the first two tiers of boxes, as also the boxes on a level with the stalls. The other set supplies air direct to the two amphitheatres or galleries. As the temperature of these various parts of the theatre may differ, the air, both in quantity and degree of heat, supplied to each part must also differ. It will be seen that this can be easily managed. By opening more or less the valves that admit the hot and the cold air into the mixing chamber the temperature is modified. Thus the air discharged into the passages is very frequently 5° or 6° Fahr. warmer than that admitted into the central portion of the theatre.

With respect to the admission of the air into the theatre in such a manner as to avoid draughts, the principle established in the ventilation of the Houses of Parliament at Westminster is applied. Instead of shafts there are small openings in all directions, under the seats of the stalls, and under each step of the galleries. The larger the opening the slower the current of air entering, and the fresh air inlets measure in all 807 square feet. The floor surface occupied by the spectators measures 14,608 square feet and the theatre has a capacity of 388,482 cubic feet.

To extract the foul air, there is a large shaft immediately above the lustre, containing a fan, which, when revolving, helps to draw up and throw out the exhausted atmosphere. A 16-horse-power engine suffices to keep this fan and the inlet fan in motion; in fact, provides all the power necessary for the successful ventilation of the theatre. Burners introduced in the lower part of this exhaust shaft, above the lustre, reflect light into the theatre, and by their heat impart extra force to the action of the shaft which, at its lower extremity, is divided off and draws up the foul air from the two amphitheatres and from the outside passages. As in the amphitheatres there is generally a great crowd of spectators, provision is thus made to draw off with extra rapidity the foul air. By different shafts coming from the sides, and by natural ascent from the body of the theatre, all the foul air is brought together in the centre chamber, which forms the lower part of the shaft, situated immediately above the lustre. This exhaust shaft is 13·5 ft. in diameter, and the exhaust fan inside is of similar dimensions. Finally, on the roof of the theatre an arrangement is made by which the shaft is opened on the side opposed to the wind, and this, again, adds force to its exhausting powers.

In summer the object is not to warm, but on the contrary, to cool the theatre. For this purpose, on a level with the ceiling, there are large shafts by which pure fresh air may be introduced from the outside direct into the upper part of the theatre, while the air which is forced into the theatre from below by the revolutions of the ventilating fan is washed and freshened by passing through a spray of water. The velocity of the fan naturally regulates the amount of air supplied, and this is increased as the theatre becomes heated by the crowd of spectators; and all this is done without producing draughts or any inconvenience to the audience. The volume of air supplied to each spectator can be mathematically calculated according to the velocity at which the ventilating fan revolves; its temperature can be regulated to a nicety. As on the stage the temperature and the general conditions are altogether different, a separate ventilation is provided, and we regret that we have not had an opportunity of judging of its efficacy; but we have been present at performances of the opera at Vienna, and can bear witness to the comfort enjoyed, to the absence of over-heating, of stuffiness, and of apparent foulness of atmosphere. In a word, the experience acquired at Vienna proves that theatres can be ventilated; and, to return to our starting-point, we maintain that what can be done in Vienna ought to be done in London.

(To be continued.)

INTERNATIONAL ARBITRATION.—We have received extracts from many New York newspapers which describe public gatherings of American citizens assembled to do honour to Mr. Frank B. Carpenter, the painter of a picture entitled "International Arbitration." The picture, the subject of which is intended to illustrate the settlement of the *Alabama* dispute, has been purchased by Mrs. W. Carson of Dalton, Mass., and presented to our Queen, who has signified her gratification and acceptance of it.

AN ACCOUNT OF AN OUTBREAK OF INFLUENZA ON BOARD THE R.M.S. *MASSILIA*,

BY CHARLES W. LOW, M.B. &c.,
LATE SURGEON P.O. AND S.N. CO.

THE *Massilia* left London for Australia on July 24th, 1891, and arrived at Melbourne on Sept. 5th, where influenza was raging. A passenger who had lived on shore during our stay came to me on our leaving for Sydney, Sept. 8th, with symptoms of influenza. This was the first case we had on board. He left the ship at Sydney on Sept. 10th, where he had a sharp attack of pneumonia. The next case was a quartermaster, who was seized on Sept. 16th, six days after the departure of the above. The next, another quartermaster, who slept in the next bunk, on the 17th. There were six other men sleeping in the same part of the ship, but none of the others came under my care. The next day, the 18th, there were 3 new cases, on the 20th 1, 22nd 2, 23rd 1, 25th 4, and so on every day until the 30th, when the largest number of new cases occurred—viz., 8; on Oct. 28th there were 7, and on Oct. 3rd there were 7, but from the latter date they gradually diminished. We left Sydney on Sept. 21st, arrived at Melbourne on the 23rd, and left again on the 25th. The largest number under treatment at one time was 28 on Oct. 3rd. The last case was on Nov. 6th, and all were well on the 11th when we arrived in London. Altogether, among the crew and passengers, there were 80 cases. The crew consisted of 193, including all classes, and the passengers varied from thirty-one to eighty-four as they changed at the ports of call. I think the probable start of the outbreak was at Melbourne, either through the men going on shore into infected houses, or from some of the numerous visitors we have always on the ship at that port. The first cases may have been slight ones, and did not come under my notice. As far as possible the cases were isolated, the deck cabins being used, as well as the usual hospital accommodation, and the ship was thoroughly disinfected in London. The average duration of the uncomplicated cases was 4·7 days, and they became much milder as the outbreak diminished. The general symptoms complained of were dry cough, headache, pains in back and limbs, loss of appetite, and in many cases sleeplessness. In 57 cases the temperature was raised; but it appeared to be of but little prognostic value, as the temperature was as high as 103·2° in some very mild cases, and in some of the most severe did not rise above 100°. Eight cases relapsed, in 7 constipation was noted, in 5 diarrhœa, in 8 vomiting, "cold in the head" in 13 cases, sore-throat in 12; deafness was complained of in 3 cases, and a rash came out in 2, one a form of urticaria on arms, face, and chest, the other vesicular and inflamed all over body, face, and arms. Pneumonia followed in 5 cases, and bronchitis also in 5. The only effect the weather had, as far as I could see, was this—that up till about Oct. 8th, whilst at sea, the ports for the greater part were closed, as it was both rough and cold; after that they were open, and plenty of fresh air circulated through the ship; the cases also began to diminish about that time.

I think the following short sketch of the way in which the epidemic spread will be of interest just now, and will corroborate Dr. Sisley and others who have been writing lately on the contagiousness of influenza. In the forepeak, where some thirty stewards slept, the bunks are arranged round three sides of a square, with a narrow entrance, and a block of four bunks in the centre. All these bunks are three deep. The first case occurred at the entrance on Sept. 28th. On the 30th there were two new cases, one sleeping on top bunk of middle block near No. 1, and the third in one of the forward bunks. The next day the fourth case occurred, next to No. 2; the next day two more, one next bunk forward of No. 4, and the sixth case under No. 2. The next day one, in one of the side bunks. The eighth case occurred on Oct. 6th (three days after the last), in a bunk next to No. 5. The next day the ninth case, sleeping in bunk under No. 8; and the last case in the forepeak on Oct. 10th, in bunk under No. 4. With regard to the native crew in the forecastle, they were so crowded together that the wonder to me was that they did not all get it. Two stewardesses out of three were laid up, one on Oct. 30th and one on Nov. 6th; both had been attending cases. Out of twelve engineers, four were ill, the third and fourth (sleeping in one cabin) and the fifth and sixth (sleeping in the next cabin). Amongst the first-class passengers, the first case after leaving Sydney was on Oct. 1st, a lady sitting at my table; then a passenger on the 2nd, who had been sitting with one of the officers who was ill; then three more on the 3rd, one the husband of the first case, another at my table, and one case in which the cause of infection was not clear; the next was on the 8th (sleeping in the next cabin to one of the former cases); then a child on the 19th, sleeping in the next cabin to the second case; on the 23rd the grandmother of the last case, who had nursed him and slept in the same cabin; and the last case on Nov. 1st had been sitting with the above before she was well. Of the second-class passengers, two cases occurred on the 2nd, one on the 3rd, and one on the 11th of October. The first three of these were waited on by a steward who also was looking after another steward who had influenza, and he had it himself later.

One of the peculiar facts connected with the outbreak is that at Malta, although the boarding officer made all passengers from Egypt swear they had not been in Arabia (on account of cholera), he informed me that influenza was neither infectious nor contagious, and granted *pratique*; but at Gibraltar we were at once put into quarantine, and passengers for that port were taken to the Civil Hospital, where they had to remain for four days, providing no case of influenza occurred amongst them. No cargo was allowed to be landed, but they took the mails with the usual precautions. It will be rather interesting to note whether, should the epidemic spread, Gibraltar will be exempt.

Plumstead, S.E.

THE SANITATION OF FLORENCE AND SIR DOUGLAS GALTON'S REPORT.

BY DR. W. W. BALDWIN.

THE general tenour of Sir Douglas Galton's Report and Recommendations upon the Sanitary Condition and Sanitation of Florence may be summed up as follows:—The generally bad sanitary condition of the houses in the Italian quarters, where the epidemic of typhoid fever exclusively prevailed last year, was quite sufficient to have caused it independently of water pollution, to which it had been mistakenly attributed before thorough investigation was made.

The fever broke out originally in the barracks of San Georgio and Belvedere on the south side of the Arno, at the terminal distribution of the supposed infected water. It had attained its maximum there between Dec. 17th and 26th, whereas it did not break out in other parts of the city until Dec. 26th, attaining its maximum on Jan. 10th, 11th, and 12th. These latter districts were nearer the source of water-supply and the supposed defect in the main conduit than the barracks where the disease first declared itself. Practically the epidemic localised itself in three distinct native quarters of Florence: (1) the district south of the Arno between the San Georgio Barrack, the Via Fuaggio, and the Via Romana; (2) the district adjacent to the Via Faentina and the Via le Regina Victoria in the north-east of Florence; (3) the centre of the city in the crowded district bounded by the Piazza Signioria, the Mercato Nuovo, and the Ponte Vecchio. All these parts of the town were furnished with the old drains, which were of square section and four feet or less below the surface of the ground. They were not water-tight, of irregular inclinations, and more or less filled with deposit. Into these drains the overflow of the *asportabile*, or movable cesspits, where they have been adopted, escaped. These drains were in direct communication with the house drains, which were also flat-bottomed and filled with deposit. The waste pipes from sinks and roofs, which were generally unprovided with traps of any kind, are in direct communication with each other and with these drains, whence exhalations pass directly into the houses. The sinks were located in kitchens, bedrooms, and passages. The closets, also generally unprovided with traps, were often located in kitchens, in bedrooms, or in their

immediate vicinity. Often these closets had no ventilation except into these rooms, and in other cases there was only a slight wooden partition between. The closet pipes, of porous terra cotta, unfurnished with traps, had often no other ventilation than into the closets. The cesspits were either located in the cellars or in a small central court. Where the cesspits were new, their walls were well cemented to the springing of the arches, but above that the porous brickwork was generally left unprotected, thus offering another easy escape for gas. In some cases an overflow from the cesspits, which is illegal, had been arranged, whereas the authorities only permit overflow from the movable cesspits. This condition of things is quite sufficient to account for the spread of typhoid fever in those Italian quarters still supplied with the old drains after a focus of infection had once been established in any part of the system, as was the case in the barracks of San Georgio and Belvedere. It should be noted in this connexion, too, that the soldiers of the above barracks had been making forced marches to various outlying towns and villages, as Sesto Prato, Calenzano, &c., where typhoid fever had been epidemic in November and December of the same year (1890).

Of great interest is the fact that the epidemic did not spread to those parts of the city supplied with the new drains, where the English and American residents and many of the better class of Italians live, and where the principal hotels and pensions are situated. These quarters are intersected by wide, well-ventilated, sunny streets. The houses are well constructed, and their sanitation has been more or less carefully attended to. There are also many large open squares and gardens well supplied with trees and shrubs. The sanitation of some of the hotels and pensions is unexceptionable, of many it is fairly good, and of a small number it is very bad, but these last are in the old drain quarters. No cases of typhoid fever were reported among the foreign residents in the new quarters. (One case was reported by an English physician, and seven cases came under the observation of the writer, all of which recovered, but these patients were living in the epidemic quarters.) The municipality have purchased a large tract of land in the mountains to the west of Florence containing springs which will furnish over 30,000 cubic metres daily of the most pure and wholesome water, but several years must elapse before this can be brought. The present water-supply is derived from galleries at a depth of twelve metres located in the mixed beds of gravel, sand, and clay upon which Florence rests. These beds appear to contain a large quantity of water, which continually flows, below the bed of the river Arno, towards the sea. A part of the original gallery was constructed under a portion of the town; but those openings which formerly permitted infiltration have been closed, and the water is now derived from the end portion of the gallery, 60 metres long. This gallery furnishes above 12,000 cubic metres of water daily in the wet season, and from 6000 to 8000 cubic metres in the dry season. It is now proposed to extend this gallery 400 or 500 metres, with the expectation of obtaining an adequate supply for present needs—viz., above 20,000 cubic metres daily. At the present time there are extensive town rubbish deposits in the vicinity of this proposed extension; but the municipality have ordered their removal, and purpose purchasing a sufficient tract of land in the neighbourhood, which will be kept in grass, and guarded from pollution. Two-thirds of all the cases of typhoid fever during the epidemic occurred in houses which were still supplied with well water. This fact, the well-known origin of the epidemic and its extension against the current of the suspected water-supply, together with careful investigations and analyses of the water itself, prove conclusively that water pollution never existed. "The water of Florence at present is quite as good as the best, and better than that of most, English towns which derive their water-supply from rivers."

Florence has made great strides in sanitary matters since 1870, thereby reducing her death-rate from about 36 per 1000 to 25 per 1000 in 1890. It is still, however, subject to occasional outbreaks of typhoid fever in the old drain quarters, which quarters can never be entirely free from epidemics of zymotic disease until the old defective drain system is superseded by the new, now in process of construction. It is recommended that the cesspools be abolished, and that the fæcal matter be carried to distant reservoirs or farms and used for agricultural purposes. All wells should be at once closed, and the landlords compelled to furnish the pure and wholesome town water. There should be an efficient house-to-house sanitary inspection, as thorough and satisfactory as the present food inspection, than which there is no better in Europe. All the drains must be frequently and copiously flushed, and in order that this may be as effective as possible the square sections should be changed to the tubular form. If these further improvements are carried out, it is believed that the death-rate of Florence might not exceed 15 per 1000 for the total population, as it certainly does not exceed that figure for the foreign residents.

Florence.

ON A NEW METHOD OF PURIFYING CHLOROFORM.

BY RENÉ DU BOIS REYMOND, M.D.
(*Communicated by* Dr. FREDERIC HEWITT.)

IT is now about a year ago that, by the advice of Professor Liebreich, the Berlin pharmacologist, Professor Pictet, formerly of Geneva, introduced a new method for the manufacture of chloroform. The main feature of the innovation is the application of intense cold, by means of which the chloroform is caused to crystallise, whilst the impurities it contains are excluded, and can be drained off.[1] The process, as described in the patent, consists of three stages. First of all the chloroform is subjected to a mild degree of cold, by which moisture and other easily frozen matter is removed. This generally only amounts to a small quantity of snow-like substance, sometimes of a yellowish tint. It is readily eliminated by means of a filter previously placed at the bottom of the vessel, and afterwards pulled up so as to receive all the solid particles on the way. The second and principal part of the proceeding consists in freezing the whole quantity of chloroform, draining off the liquid residue, and allowing the pure crystals, thus separated, again to liquefy. Thirdly and lastly, the pure chloroform is further refined by distilling under diminished pressure at a very low temperature.

The apparatus used to produce the necessary cold was invented by Professor Pictet. The chloroform purified by crystallisation possesses a very mild and agreeable odour. Tested by the ordinary tests it appears perfectly pure. But its especial characteristic is its remarkable degree of durability. It has been affirmed that absolutely pure chloroform of 1·500 specific gravity will not keep. But this is evidently a mistake. The alcohol which is usually added to chloroform is only of use when impurities are present, and is quite unnecessary if the anæsthetic is chemically pure. As this is indisputably the only way in which alcohol affects the chloroform, it follows, from the mere fact that chloroform with alcohol seems to keep better than without, that really pure chloroform would keep still better. This conclusion is borne out by facts. The case is analogous to that of nitrate of silver, which will remain unchanged by the action of sunlight if perfectly pure and shut off from the air. The pure chloroform keeps as well without as any other chloroform with alcohol. This has been proved by the following tests. The addition of bichromate of potash indicates the total absence of alcohol previously contained in the drug. Tests as to durability were carried on during several months. Samples of chloroform in bottles of clear glass were exposed to the action of sunlight on the roof of the laboratory, and tested at certain intervals with nitrate of silver, iodide of zinc, and starch. Whilst ordinary chloroform invariably gave signs of decomposition on the very next day, the crystallised chloroform on an average kept unaltered for a week. Repeated trials were made by means of a combination of the nitrate of silver and the sulphuric acid tests, in the following manner. A small quantity of chloroform was poured into a phial containing about the same volume of concentrated sulphuric acid, and was allowed to remain there, being well shaken from time to time. At fixed intervals the nitrate of silver test was applied to samples of the chloroform thus treated. The presence of the sulphuric acid acts as a permanently strong decomposing agent, and this method is therefore equal to and more handy than the sunlight test. Ordinary chloroform, as a rule, shows signs of decomposition after a few minutes; the best kinds will

[1] See THE LANCET, Nov. 21st, p. 1187.

stand about twenty-four hours; but the crystallised chloroform held out for several days.

The new chloroform is at present being tried at the principal hospitals of Berlin, and the following remarks on its clinical properties may be ventured on. 1. There is no difference as to the excitability during the inhalation, or vomiting after. 2. Anæsthesia is produced more promptly and with smaller doses than ordinarily, frequently appearing before extinction of reflex action. 3. Anæsthesia remains after stoppage of inhalation longer than usual, sometimes even beyond return of consciousness.

METROPOLITAN HOSPITAL SUNDAY FUND.

ANNUAL MEETING OF CONSTITUENTS.

THE nineteenth annual general meeting of constituents of the Metropolitan Hospital Sunday Fund was held on Monday afternoon at the Mansion House, the Right Honourable the Lord Mayor (Alderman David Evans, President and Treasurer), presiding over a good attendance. Among others, the Lord Mayor was supported by Sir Sydney H. Waterlow, Bart. (Vice-President), the Right Honourable Lord Sandhurst, Lieutenant-Colonel Lord Frederick Fitzroy, the Chief Rabbi (Dr. Adler), the Rev. Canon Fleming, B.D., the Rev. Canon Ingram, M.A., the Rev. Canon Leigh, the Rev. Canon Benham, the Rev. Dr. White, the Rev. Dr. Kennedy, the Rev. S. B. Burnaby, M.A., the Rev. A. A. Harland, M.A., the Rev. J. F. Kitto, M.A., the Rev. Andrew Crombie, the Rev. R. R. Connell, the Rev. W. H. Barlow, the Rev. E. E Jenkins, the Rev. James White, the Rev. — Lach-Szyrma, the Rev. V. R. Leonard, the Rev. R. Husband Davies, the Rev. C. H. Coryndon Baker, D.D., the Rev. J. H. Wichelow, the Rev. T. Evans, the Rev. A. Woods, the Rev. E. W. Baker, the Rev. E. P. Green, the Rev. E F. Wilson, the Rev. Jas. Forsyth, the Rev. J. Draper, the Rev. J. W. Gedge, the Rev. S Barnett, the Rev. A. Spencer, the Rev. Jas. Maclagan, the Rev. John Tuckwell, the Rev. W. Windle, the Rev. H J. Berguer, the Rev. J. G. Curry, Mr. John Boodle, Mr. Thomas Wakley, Mr. Alfred Cohen, Mr. Daniel Moore, Dr. C. J. Hare, Dr. Glover, Mr. Richard B. Martin (honorary secretary), and Mr. Henry N. Custance (secretary).

The annual report of the Council stated that the collections during the past year, under the presidency of the Right Honourable Sir Joseph Savory, Bart., Lord Mayor, exceeded every former record by nearly £2515, the total being £45,330 13*s.* 5*d.*, as against £42,814 16*s.* 9*d.* This total was made up of £36,310 17*s.* 6*d.* from 1711 contributing congregations, against £38,823 2*s.* 1*d.* from 1712 contributing congregations last year; and £9019 15*s.* 11*d.* from legacies and donations, against £3991 14*s.* 8*d.*; thus showing a decrease in the former receipts and an increase in the latter. The donations this year included £5000 from the late Duke of Cleveland, K.G., and £1000 from Sir Savile Crossley, Bart. Among the congregational contributions, the Rev. Prebendary Forrest, D.D., Vicar of St. Jude's, South Kensington (now Dean of Worcester), again headed the list with £1300, the largest sum ever received from one congregation; the Rev. Canon Fleming, B.D., Vicar of St. Michael's, Chester-square, came next with £1209 17*s.* 6*d.*; and from Christ Church, Lancaster-gate, the Rev. J. C. Ridgeway sent upwards of £900.

No legacies have been bequeathed since 1890 (£1003 14*s.* from the executors of the late Mr. Thos. Crouch). The amount available for distribution, after allowing for liabilities and the usual current expenses, was £43,157 15*s.* 4*d.* Of this total, £40,907 15*s.* 4*d.* was recommended by the committee of distribution, after an examination of reports and balance-sheets of various institutions, to 116 hospitals and 56 dispensaries. Five per cent. of the total collected (viz., £2250) was set apart to purchase surgical appliances in monthly proportions during the ensuing year, dating from July 17th, when the committee's report was presented to the Council. On July 27th a special meeting of the Council was held to receive the committee's report, and the following resolutions were carried unanimously:—"(1) That the report of the Committee of Distribution for the year 1891 be and is hereby approved, and that the several awards recommended be paid as soon as possible. (2) That the cordial thanks of the Council be and are hereby given to Sir Sydney H. Waterlow, Bart. (chairman), and to the other members of the Committee of Distribution, for the labour and great care bestowed in the preparation of the awards they have recommended, and for the very efficient report of their proceedings. (3) That the thanks of the Council be and are hereby given to the editors of newspapers who have pleaded the needs of hospitals, and advocated the cause of this fund, with a view to increasing this year's collection. (4) That the cordial thanks of the Council are now given to the Right Honourable Joseph Savory, Lord Mayor, who, as president and treasurer, has devoted his valuable time to promote the growth of the fund, not only during the years in which he has held his seat on the Council, but especially now during his mayoralty, when the receipts have surpassed all previous records." The working expenses of the fund for the year 1891 were £1695 18*s.*, as compared with £1544 2*s.* 8*d.* spent last year, being 3·741 per cent. of the gross receipts. The average percentage of working expenses for the previous eighteen years is 3·539. The Council, by unanimous resolution, increased the Secretary's salary after eighteen years' service.

In opening the meeting, the LORD MAYOR observed that the doors of the Mansion House were thrown wide open to charity and to charitable purposes, but no charity was received there with such great warmth at the hands of the Lord Mayor as this one. He trusted that the success of the past would be maintained, and if he, during his year of office, could add in any way, however small, to that success, needless to say he should be glad to do so. Old friends passed away, but it was a joy to know that their place was taken by a younger generation, and he trusted that, profiting by their example, they would give such increased strength to the fund in future that they might view it with every feeling of confidence.

Sir SYDNEY WATERLOW moved the adoption of the report. He did so, he said, for the nineteenth time. Commenting on the report, he pointed out that their increase of income was not due to an increase in the collections, but to the donations of £5000 from the Duke of Cleveland and £1000 from Sir Savile Crossley. Though there was only one congregation less, in contributions there was £2512 4*s.* 7*d.* less received. No doubt the receipts were largely influenced by the times, which had been rather bad. He believed that the public quite recognised that this Fund was the best means of bestowing charity, and that the money collected was distributed equitably. The Committee of Distribution might, indeed, be called a committee of experts, and they submitted the reports and balance sheets of the hospitals to a rigorous scrutiny. In cases where institutions were not conducted on sound principles there was a reduction in the amount given, and this year one hospital out of the number was not considered entitled to anything. He submitted that the public might contribute with every confidence that their money would be well bestowed.

Lord SANDHURST seconded. He congratulated the Council on the fact that, having to deal with so large a sum as £45,000, the working expenses had been kept so low as considerably less than 4 per cent. As one of the administrators of one of the largest metropolitan charities, the Middlesex Hospital, he felt perhaps a little interested at the position of that hospital on the list, which was headed by the London Hospital with a grant of £3250. It was right that this should be so, for the London Hospital was the largest in the metropolis, and had constant demands made on it with which it was difficult to keep pace. He had studied the administration of continental hospitals, but found only one to beat the London hospitals. That was at Berlin, and there they had instituted the English system of nursing, owing to the interest taken in the hospital by the Empress Frederick.

Canon FLEMING proposed the next resolution, which was that the laws of the constitution which have been in force during the past year be continued. This was seconded by Dr. KENNEDY, who expressed the opinion that the diminution in the collections this year was due to the inconvenience of the day which was fixed for the purpose. The first Sunday of the month was not a day that suited many Nonconformist bodies.

The Chief Rabbi (Dr. ADLER) then proposed: "That the Council for the year 1891 be re-elected for the year 1892, with the following names to fill up vacancies—viz.: The Rev. the Hon. Canon Pelham, M.A., the Rev. R. S. Hassard, M.A., the Rev. Brooke Harford, the Right Hon.

the Lord Charles Bruce, the Right Hon. Lord Sandhurst, Sir Joseph Savory, Bart., and Reginald B. D. Acland, Esq." In doing so, he deplored especially the vacancy created by the death of Sir Robert Fowler. Referring to the statement of Sir Sydney Waterlow that he had moved the adoption of the report for the nineteenth time, Dr. Adler said that Sir Sydney Waterlow had done a good deal more than move resolutions. To his sagacity the success of the Fund was in a great measure due. They were also very much indebted to Mr. Wakley for his Supplements to THE LANCET, and to all the leading newspapers for the assistance they had given in advocating the cause of the Fund. He was reminded of a little anecdote in a *Times* leading article, where one did not look for anecdotes as a rule. It was there related how a gentleman, not too well known for benevolence, was passing a hospital which had been damaged by the bursting of a water-tank on the roof, and asked a friend who was with him the cause of the accident. The friend told him that he would read the cause of the accident in an inscription on the front of the hospital, which ran, "Supported by voluntary contributions." It was thus evident that the support was inadequate. In conclusion, he hoped to see during the coming year the attainment of their ambition—viz., to reach the figure £50,000.

The Rev. J. F. KITTO, seconding, remarked that without Sir Sydney Waterlow the fund would have had no existence at all. He adverted with great pleasure to the absence of religious differences on a council representing all denominations.

The next resolution, proposed by the Rev. S. B. BURNABY, seconded by Dr. HARE, ran:—"That June 19th be fixed for Hospital Sunday of 1892, and that the cordial coöperation of all ministers of religion within the metropolitan area be again invited in the usual way."

The Rev. Dr. CORYNDON BAKER, rising in the body of the hall, suggested that the cause of the Fund would be promoted by an appeal to the working men of London and the holding of special working men's services. He also thought the services of celebrated country preachers might be secured for metropolitan pulpits on Hospital Sunday. Ten per cent. instead of 5 per cent. should, in his opinion, be set apart for the purchase of surgical appliances.

In responding to a vote of thanks, the LORD MAYOR expressed his satisfaction at the receipts, which, he considered, showed a substantial increase. If persons subscribed to a collection in church, they would hardly contribute twice over in the form of a donation, and *vice versâ*. He thought that possibly the collections in some of the churches might have been influenced by the omnibus strike, which occurred at the time, as it would have a tendency to lessen the attendance at church.

This brought the meeting to a close.

NEW ROYAL WARRANT FOR THE INDIAN MEDICAL SERVICE.

INDIA OFFICE, *December 14th, 1891.*

VICTORIA, R I.

WHEREAS we deem it expedient to revise the Rules for the promotion and precedence of our Indian Medical Service:

Our will and pleasure is that our warrants of April 30th, 1887, and Feb. 8th, 1889, be cancelled, and that from and after Aug 7th, 1891, the following rules shall be established, and that by these rules our Viceroy and Governor-General in Council, and our Governors in Council of Madras and Bombay respectively, shall be governed.

1. The substantive ranks of medical officers in our Indian military forces shall be as follows:—

Surgeon-Major-General.
Surgeon-Colonel.
Brigade-Surgeon-Lieutenant-Colonel.
Surgeon-Lieutenant-Colonel.
Surgeon-Major.
Surgeon-Captain.
Surgeon-Lieutenant.

These ranks shall carry precedence and other advantages attaching to the rank indicated by the military portion of the title, but shall not (except as provided in Article 2) entitle the officer to military command, or to the Presidency of Courts-Martial, Courts of Inquiry, Committees, or Boards of Survey.

2. The officers of our Indian Medical Service shall command the medical officers and subordinates, the Army Hospital Native Corps, the hospital attendants, and others doing duty in military hospitals, as well as all patients in military hospitals; and shall command the Medical Staff Corps, when doing duty therewith, in the same manner as officers of the Medical Staff, as well as such officers, non-commissioned officers, and men as may be attached for duty to the Medical Staff Corps; but otherwise they shall not hold any military command.

3. A Surgeon-Lieutenant shall be promoted to the rank of Surgeon-Captain on completing three years' full-pay service.

4. A Surgeon-Captain shall be promoted to the rank of Surgeon-Major on completing twelve years' full-pay service.

5. A Surgeon-Major shall be promoted to the rank of Surgeon-Lieutenant-Colonel on completing twenty years' full-pay service.

6. All promotion from the rank of Surgeon-Lieutenant-Colonel to that of Brigade-Surgeon-Lieutenant-Colonel shall be given by selection for ability and merit.

7. All promotion from the rank of Brigade-Surgeon-Lieutenant-Colonel to that of Surgeon-Colonel, and from the rank of Surgeon-Colonel to that of Surgeon-Major-General, shall be given by selection for ability and merit, and the grounds of such selection shall be stated to us in writing, and recorded in the office of our Secretary of State for India.

8. On appointment as our Honorary Physician or Surgeon under Article 11, an officer below the rank of Surgeon-Colonel shall be promoted to that rank, remaining supernumerary of his rank until he would have attained the rank of Surgeon-Colonel in ordinary course.

9. In case of distinguished service in the field, an officer of our Indian Medical Service may be promoted from any rank to that next above it, remaining supernumerary in the higher rank until he would have been promoted in ordinary course, or until selected for further promotion for which he shall be eligible according to his standing in the higher rank.

10. With a view to maintain the efficiency of the Service, medical officers shall be placed on the Retired List when they attain the following ages:—

Surgeon-Major-General	60
Surgeon-Colonel	
Brigade-Surgeon-Lieutenant-Colonel	55
Surgeon-Lieutenant-Colonel	
Surgeon-Major	

But as respects officers below the rank of Surgeon-Colonel who entered the Service prior to Jan. 13th, 1860, this rule shall be relaxed, and an officer who has attained the age of fifty five years without having attained the rank of Surgeon-Colonel shall be permitted to remain in the Service for three years more, on his perfect competency and fitness being certified in such manner as our Secretary of State for India in Council may direct. In any special case where it would appear to be for the good of our Service that the officer should be continued in employment, he may be so continued, subject in each case to the sanction of our Secretary of State for India in Council.

11. Six of the most meritorious medical officers of the Service shall be named our Honorary Physicians, and six our Honorary Surgeons.

Given at our Court at Windsor, this seventh day of December, in the fifty-fifth year of our Reign.

By Her Majesty's command. CROSS.

GENERAL PRACTITIONERS' ALLIANCE.

A MEETING of the Council of the above Society was held at the offices, 29, Threadneedle-street, E.C., on Friday, Dec. 11th, Mr. George Brown, President, in the chair.

The minutes of the previous meeting having been read and confirmed, several new members were elected.

Resolved: That the membership of all members admitted to the Alliance since November 1st date as from the 1st January, 1892.

The President stated that since their last meeting the election of Direct Representatives to the General Medical

Council had been completed, and although the result was not altogether as they could have wished, it was, he considered, one on which the Alliance could be congratulated. The voting showed that the profession strongly desired to be represented by general practitioners, and by a large majority had placed a general practitioner at the head of the poll. It was not the desire of the Alliance to displace Dr. Glover, or a third candidate might have been put forward—it may have been a tactical mistake not to have done so,—as in that case a larger number of general practitioners would probably have returned their voting papers, and the supporters of Dr. Alderson and himself would probably not have given their third vote to one of the retiring candidates, as in a large majority of cases they had done.

Dr. Alderson having made some remarks expressing his satisfaction with the favour with which his candidature had been received, and which he regarded as most encouraging for the future and highly creditable to the Alliance, seeing that it had been so recently organised, the Council adjourned.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5414 births and 3580 deaths were registered during the week ending Dec. 12th. The annual rate of mortality in these towns, which had been 20·5 and 22·6 per 1000 in the preceding two weeks, declined last week to 19·8. The rate was 18·1 in London and 21·3 in the twenty-seven provincial towns. During the first ten weeks of the current quarter the death-rate in the twenty-eight towns averaged 19·7 per 1000, and was 1·4 below the mean rate in the corresponding periods of the ten years 1881-90. The lowest rates in these towns last week were 12·4 in Norwich, 12·8 in Leicester, 13·2 in Halifax, and 13·5 in Hull; the highest rates were 33·2 in Cardiff, 36·4 in Newcastle-upon-Tyne, 40·9 in Wolverhampton, and 45·1 in Plymouth. The deaths referred to the principal zymotic diseases, which had been 391 and 476 in the preceding two weeks, declined again last week to 402; they included 116 from whooping-cough, 92 from measles, 55 from "fever" (principally enteric), 49 from diphtheria, 48 from diarrhœa, 42 from scarlet fever, and not one from small-pox. No fatal case of any of these diseases was registered in Halifax; in the other towns the lowest zymotic death-rates were recorded in Leicester, Bolton, and Huddersfield; and the highest rates in Sunderland, Cardiff, Birkenhead, and Newcastle-upon-Tyne. The greatest mortality from measles occurred in Cardiff, Wolverhampton, Sunderland, Birkenhead, and Newcastle-upon-Tyne; from scarlet fever in Plymouth; from whooping-cough in Derby, Bradford, Wolverhampton, Nottingham, Newcastle-upon-Tyne, and Blackburn; and from diarrhœa in Birkenhead and Blackburn. The mortality from "fever" showed no marked excess in any of the twenty-eight towns. The 49 deaths from diphtheria included 33 in London, and 2 each in Portsmouth, Derby, Manchester, Sunderland, and Newcastle-upon-Tyne. No fatal case of small-pox was registered in any of the twenty-eight large towns; one small-pox patient was under treatment on Saturday last in the Metropolitan Asylum Hospital at Dartford, but not one in the Highgate Small-pox Hospital. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 1555, against numbers increasing from 947 to 1554 in the preceding fourteen weeks; 137 new cases were admitted during the week, against 152 and 166 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding ten weeks from 171 to 449, declined last week to 348, and were 97 below the corrected average. The causes of 70, or 2·0 per cent., of the deaths in the twenty-eight towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Leeds, Sunderland, and Cardiff, and in four other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Leicester, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the preceding nine weeks from 18·7 to 32·2 per 1000, declined again to 30·6 during the week ending Dec. 12th, but exceeded by as much as 10·8 the mean rate that prevailed during the same period in the twenty-eight large English towns. The rates in the eight Scotch towns ranged from 20·3 in Perth and 23·4 in Aberdeen to 40·9 in Leith and 45·3 in Edinburgh. The 787 deaths in these towns showed a decline of 43 from the number in the preceding week, and included 18 which were referred to whooping-cough, 12 to diphtheria, 9 to scarlet fever, 7 to diarrhœa, 7 to "fever," 6 to measles, and not one to small-pox. In all, 59 deaths resulted from these principal zymotic diseases, against 53 and 57 in the preceding two weeks. These 59 deaths were equal to an annual rate of 2·3 per 1000, which was slightly above the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 13 in each of the preceding two weeks, rose again last week to 18, of which 7 occurred in Glasgow, 3 in Edinburgh, 3 in Dundee, and 3 in Paisley. The 12 deaths from diphtheria exceeded by 4 the number in the previous week, and included 3 in Glasgow, 3 in Dundee, 2 in Edinburgh, and 2 in Greenock. The fatal cases of scarlet fever, which had been 4 and 6 in the preceding two weeks, further rose to 9 last week, of which 4 occurred in Glasgow and 3 in Greenock. The 7 deaths from "fever" also showed a further increase upon recent weekly numbers, and included 4 in Glasgow, where 5 of the 6 fatal cases of measles were also recorded. The deaths referred to diseases of the respiratory organs in these towns, which had increased in the preceding seven weeks from 98 to 331, declined last week to 297, but exceeded by as many as 160 the number in the corresponding week of last year. The causes of 78, or nearly 10 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 30·3 and 34·7 per 1000 in the preceding two weeks, declined again to 25·2 during the week ending Dec. 12th. During the past ten weeks of the current quarter the death-rate in the city averaged 27·9 per 1000, against 18·5 in London and 25·7 in Edinburgh. The 168 deaths in Dublin during the week under notice showed a decline of 63 from the number in the previous week, and included 11 which were referred to different forms of "fever," 5 to diarrhœa, 3 to whooping-cough, and not one either to small-pox, measles, scarlet fever, or diphtheria. In all, 19 deaths resulted from these principal zymotic diseases, equal to an annual rate of 2·7 per 1000, the rate during the same period being 2·3 in London and 1·6 in Edinburgh. The fatal cases of "fever," which had been 8 and 7 in the preceding two weeks, rose again last week to 11. The 5 deaths referred to diarrhœa exceeded by one the number in the previous week. The fatal cases of whooping-cough, which had been 4 and 2 in the previous two weeks, rose again to 3 last week. The 168 deaths registered in Dublin included 29 of infants under one year of age, and 43 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a marked decline from the number recorded in the preceding week. Three inquest cases and 3 deaths from violence were registered; and 51, or more than a third, of the deaths occurred in public institutions. The causes of 11, or nearly 7 per cent., of the deaths in the city were not certified.

THE SERVICES.

ARMY MEDICAL STAFF.—Surgeon-Colonel Edmund Greswold McDowell, C.B., is placed on retired pay (dated Nov. 30th, 1891); Surgeon-Major Aylmer Ellis Hayes, D.S.O., from the Seconded List, to be Surgeon-Major (dated Dec. 3rd, 1891).—The restoration to the establishment of Surgeon-Major (ranking as Major) Wm. Hamilton Briggs, which appeared in the *Gazette* of Nov. 17th, 1891, is cancelled.

ARMY MEDICAL RESERVE OF OFFICERS.—Surgeon Arthur Ormsby Wiley, 1st Volunteer Battalion, the Prince of Wales's Own (West Yorkshire Regiment), to be Surgeon-Major, ranking as Major (dated Dec. 16th, 1891).

NAVAL MEDICAL SERVICE.—The following appointments have been made at the Admiralty:—Fleet-Surgeon Richard A. Mowll to the *Triumph* (dated Dec. 16th, 1891). Staff

Surgeons: John D. Henwood to the *Severn*, Edward H. Williams to the *Victor Emanuel*, and Gilbert Kirker to the *Amphion* (all dated Dec. 18th, 1891); Joseph Crowley to the *Scout* (dated Dec. 16th, 1891). Surgeons: George F Dean to Haslar Hospital, Basil R. Clarke to the *Wildfire*, John K. Robinson to the *Triumph*, H. W. Finlayson to the *Cormorant* and Gibraltar Yard, E. C. Cridland to the *Ganges*, Robert W. Senior to the *Invincible*, Ernest A. Penfold to the *Neptune*, George H. H. Symonds to the *Jackal*, James M'C. Martin to the *Daphne*, and Edwin J. Biden to the Portsmouth Division Royal Marines (all dated Dec. 16th, 1891); E. H. Meaden and C. H. Upham to Hong Kong Hospital, Ernest E. Bray to the *Archer*, George A. S. Bell to the *Severn*, Edward C. Ward to the *Hyacinth*, Walter J. Bearblock and Fredk. Fedarb to the *Victor Emanuel*, William J. Colborne to the *Amphion*, John E. Penn to the *Gannet*, and Anthony Kidd to the *Cambridge* (all dated Dec. 18th, 1891); Charles J. S. Kelsall to the *Linnet*, and Richard Miller to the *Cockatrice* (undated); James Shorten to be Surgeon and Agent at Courtmaskery and Howestrand (dated Dec. 16th, 1891).

VOLUNTEER CORPS.—*Artillery:* 1st Norfolk (Eastern Division, Royal Artillery): Surgeon-Major T. H. Moxon to be Surgeon-Lieutenant-Colonel (dated Dec. 12th, 1891).—2nd Volunteer Battalion, the Oxfordshire Light Infantry: Surgeon-Lieutenant J. A. Rigge to be Surgeon-Captain (dated Dec. 12th, 1891).—2nd Volunteer Battalion, the Duke of Cambridge's Own (Middlesex Regiment):—Surgeon-Captain C. A. Patten to be Surgeon-Major (dated Dec. 12th, 1891).

Correspondence.

"Audi alteram partem."

"THE DUBLIN LEPROSY CASE."

To the Editors of THE LANCET.

SIRS,—In your issue of Nov. 28th, Dr. Creighton calls in question the accuracy of the diagnosis of what is called "the Dublin leprosy case," and expresses a strong opinion that the case was one of "button scurvy." The case has been lately quoted largely—among others, by Dr. Thin, in his valuable book "Leprosy"—as affording very strong proof of the contagiousness of the disease. Hence the great importance that all doubt as to diagnosis should be removed. There were really two cases, brothers, one of whom, I contend, contracted the disease by contagion from the other. Of the first case I obtained a drawing at the time. Of the second case I did not, as I did not foresee this challenge, and as the two cases were so manifestly of one and the same disease that a drawing of one was, *mutatis mutandis*, a drawing of the other. If the first case was leprosy, the second was leprosy; if the first was not, the second was not. I will, therefore, speak of the case in the singular, as any reference to one is applicable to the other. I had hoped to have published with these observations a reproduction of the drawing, hence the delay in my reply; but I have found the difficulties greater than I anticipated, and I have not succeeded in obtaining a satisfactory one. I am perfectly aware that the case did not precisely conform to type in all details, but how few cases of any disease do! In all essential particulars it did conform. The departures from type were in degree, not in kind. Regarded broadly, the aspect and features of the disease were unmistakable, and were quite unlike those of "button scurvy,"[1] or yaws. As far as I am aware, "button scurvy" has not been identified in Ireland since 1851. Few, therefore, if any of the present generation of still practising medical men have seen it. A graphic description of the disease is to be found in Hirsch's "Handbook of Geographical and Historical Pathology," vol. ii., page 112 (New Sydenham Society). The book is on everyone's bookshelf, so I need not occupy your space by quoting his description; but anyone can there compare the characters of the disease with those of the case in question, which is to be found in the *Dublin Journal of Medical Science* of 1872, vol. liii., p. 290, and in that of 1877, vol. lxiii., p. 562. Five minutes will suffice for the comparison, and, if I mistake not, the impartial reader will be more impressed by the very wide differences between the two diseases than by their similars. I had at first intended entering into the details of the diagnosis, and comparing antithetically the history, symptoms, and course of the two diseases; but after having read in THE LANCET of Dec. 5th, and in that of Dec. 12th, the very clear and decided testimony of Dr. John Hillis, the well-known author of the valuable work, "Leprosy in British Guiana," I really considered this task unnecessary.

In his letter of Dec. 5th, Dr. Hillis (than whom there is no higher living authority on the subject) says: "Beyond all cavil, the case was one of tubercular leprosy." But, it may be objected, Dr. Hillis never saw the case. True, but he has seen enough of the disease to recognise it when represented in a water-colour drawing, nearly life size, by a professional artist, accompanied by a description of its history and symptoms. And further, he had on more than one occasion discussed the case fully with myself, who was not unfamiliar with the disease, having seen many hundred cases in Norway. If Dr. Hillis's authority is not deemed sufficient, there are still living some who remember the cases distinctly, who had seen and examined them, and who, aware that the diagnosis has been challenged by a worthy foe, and with a full knowledge of the responsibility attached thereto, have, independently of each other, authorised me in writing to say that they confirmed the diagnosis. Among them are Samuel Gordon, M.D., physician to the House of Industry Hospitals, ex-President of the Royal Academy of Medicine in Ireland, ex-President of the Royal College of Physicians, Ireland; J. Magee Finny, M.D., physician to Sir P. Dun's Hospital, King's Professor of Practice of Medicine, University of Dublin, President of the Royal College of Physicians, Ireland; Sir Wm. Stokes, M.D., surgeon to the Richmond Hospital, Professor of Surgery, and ex-President R.C.S.I.; E. D. Mapother, M.D., late physician to St. Vincent's Hospital, ex-Professor of Physiology, and ex-President R.C.S.I.; Wm. J. Wheeler, M.D., surgeon to the City of Dublin Hospital, ex-President R.C.S.I.; James Little, M.D., physician to the Adelaide Hospital, ex-Professor of Practice of Medicine R.C.S.I., ex-president, R.C.P.I. (these two latter had seen much of leprosy in the East); T. W. Grimshaw, M.D., consulting physician to Steevens' Hospital, Registrar-General for Ireland; Walter G. Smith, M.D., physician to Sir P. Dun's Hospital; King's Professor of Materia Medica in the University of Dublin; and Wm. Thornley Stoker, M.D., surgeon to Richmond Hospital, ex-Professor of Anatomy, R.C.S.I. These are not unknown men whose opinions might be dismissed with a shrug of the shoulders. They are, without exception, men who stand in the very front rank of the profession—men who have won their laurels well and nobly; and, I ask, is not the unanimous testimony of these men, who have seen the case, of more weight than that of Dr. Creighton, who has not?

I am, Sirs, yours truly,

J. HAWTREY BENSON, M.D.

Fitzwilliam-square, Dublin, Dec. 14th, 1891.

[1] There was no "whitish film" at any time on the surface of any of the tubercles, as Dr. Creighton, without any authority whatever, suggested in his letter of Dec. 5th was present. Can the wish have been father to the thought, as such a symptom, if present, would have made his diagnosis more excusable?

ANTISEPTICS IN OPHTHALMIC SURGERY.

To the Editors of THE LANCET.

SIRS,—The recent correspondence in THE LANCET on the "Use of Antiseptics" dealt with a subject of so much practical importance that I trust you will be able to find room for the following small addition to the controversy, containing the substance of a paper on "Antiseptics in Ophthalmic Surgery," read on the 2nd instant before the Southampton Medical Society. My standpoint differs somewhat from that of either of your previous correspondents, and I hope that my arguments may be deemed worthy of consideration by your ophthalmological readers. I take it that the real question at issue between those who believe in and use antiseptics and those who do not is whether the antiseptic substances admissible in surgery actually produce the effects attributed to them, rather than whether it is desirable that living organisms should be excluded from a wound. Overlooking this aspect of the question, the advocates of antiseptics sometimes seem unable to understand the position of a surgeon who, in face of the admitted facts of decomposition and infection by micro-organisms, has the hardihood to operate without using any antiseptics. In what follows I

wish it to be clearly understood that I do not dispute the desirability of excluding organisms from wounds. I merely question the possibility of doing so with our present means.

It must be borne in mind that the fact of a wound being treated antiseptically and doing well is no proof whatever that living organisms have been excluded from it. It is quite possible that they may have entered and done no harm, just as they do in numberless operations performed without antiseptics and with perfect results. There are two ways in which we may seek to prove the efficacy of antiseptics: either by comparing the results of a large number of similar cases, some treated with and others without antiseptics, or by performing experiments so planned that if any germs escape destruction by the antiseptics they must declare themselves. For the statistical method the materials are at hand in the case of abdominal surgery, and I may take it as proved that in this branch no better results are at present obtained by antiseptic methods than without them. We must therefore conclude, as regards abdominal surgery, either that germs are harmless, or that, antiseptics being ineffectual, the two methods are equally septic and differ only in name. What is true of one branch of surgery is not necessarily true of another, and it would be very interesting to discover whether the results of ophthalmic surgery are in harmony with the experimental facts which point to the utter inability of antiseptics to free the eye from the most lusty germs. Among others, an interesting paper by Dr. Dubief in the September number of the *Annales d'Oculistique* seems to set forth very clearly the practical impossibility of doing such an operation as the extraction of cataract aseptically, and it determined me to perform the following experiment to test the method, which apparently just now is widely believed to lead to aseptic results. I killed a healthy rabbit, cut off its head, and immediately plunged the head into a basin containing solution of hyd. perchlor. (1 in 4000). With a pair of forceps and scissors well cleaned and soaked in the solution the eyes and tongue were removed under the water, well shaken about in it for half a minute, taken out with the forceps, and immediately sealed up with chloroform in gutta-percha tissue bags previously soaked in and just removed from a solution of perchloride of 1 in 4000. In a few days all the specimens stank abominably, and the fact that living organisms existed in them was made obvious.

I contend that at present it is impossible to operate on the human eye in a way more likely to destroy germs, or to dress it after the operation in a manner so likely to exclude them; and I cannot help thinking that if those surgeons who attribute their good results to asepsis would check their methods in some such way as I have described they might discover that the asepsis is imaginary. We can all admit the theoretical advantages of asepsis, and if so far antiseptics have proved inefficient, it is hard to blame those who introduced antiseptic methods in the full hope of perfect asepticity. The antiseptic theory has helped to impress the importance of cleanliness, and recent experiments have shown the uselessness of antiseptics without it, for the substances which may be regarded as representing the gastric juice and urine and excrement of germs are capable of giving rise to suppuration, and should antiseptics destroy the bodies they cannot destroy these spirits of the germs. A piece of dirt in the teeth of a pair of forceps may get loose in an eye and set up mischief after it has been boiled and treated with antiseptics.

I am, Sirs, yours truly,

Southampton, Dec. 3rd, 1891. J. F. BULLAR.

UNILATERAL PAROTITIS.

To the Editors of THE LANCET.

SIRS,—I am much interested in a short note in your issue of Dec. 12th, in which Dr. H. B. Donkin records the occurrence of unilateral parotitis in three cases of gastric ulcer during strict treatment by nutrient enemata. I am, however, disposed to think that dryness of the buccal mucous membrane, with blocking of Steno's duct, is not—at any rate, in all cases—the cause. During the past three weeks I have seen a gentleman, aged twenty-six, several times in consultation with Dr. Tireman. He had gastric ulcer with profuse hæmatemesis on Nov. 11th, 16th, and 20th. I saw him first on Nov. 16th and he was allowed ice only by the mouth, nutrient suppositories being used every four hours. All bleeding having ceased on Nov. 18th, peptonised milk, one or two tablespoonfuls at a time, was allowed, the nutrient suppositories being still continued. On Nov. 20th bleeding occurred again, about one pint being vomited, and nothing but ice was allowed for the next two days; a tablespoonful of milk and soda water every half hour was then allowed, the nutrient suppositories being steadily continued throughout. On Nov. 24th the left parotid was noticed to be swollen and the temperature 100°; in two or three days, however, the swelling had entirely disappeared, and the temperature, which rose to 102°, had fallen to normal. In this case the buccal mucous membrane never became dry, and though nutriment was being given by rectum, about two pints of milk and soda water had been taken in the twenty-four hours preceding the onset of the parotitis. This is the first case of gastric ulcer in which I have met with unilateral parotitis, and certainly in this case the causal association mentioned by Dr. Donkin does not hold good.

I am, Sirs, yours faithfully,

Hull, Dec. 12th, 1891. FRANK NICHOLSON.

"WANT OF ISOLATION ACCOMMODATION IN SOUTH HORNSEY."

To the Editors of THE LANCET.

SIRS,—The letter on the above subject in your last issue requires no reply from me, but I find a report has been circulated and commented upon by some of the London weekly papers—viz., that in South Hornsey scarlet fever of a malignant character is now raging. This, I am thankful to say, is not the case, and I may add that no death from it has taken place in the district during the past year.

I have been asked on several occasions during the last week if it is not true that scarlet fever and other zymotic diseases spread from South Hornsey to the surrounding districts. This I will endeavour to show cannot be the case by the following brief statement of the sanitary condition of the district since my appointment in 1873, and which may not prove altogether uninteresting to your readers. In that year the death-rate was 17·5 per 1000, in London it was 22·8. The zymotic death-rate was 2·9. For the first five years the average death-rate was 17·7, and the zymotic death-rate averaged 1·1. The death-rate has gradually decreased, and last year it was only 11·7, and the zymotic death-rate 1·1.

These facts speak for themselves as to the sanitary condition of South Hornsey, showing it to be the healthiest district around London, and that although the density of the population is greater than that of London itself, where it is 56·5 per acre, while in South Hornsey it is 58·2.

I am, Sirs, yours truly,

THOS. S H. JACKMAN,

Dec. 16th, 1891. Medical Officer of Health, South Hornsey.

THE AFTER-TREATMENT OF PLASTIC OPERATIONS ON THE PERINEUM.

To the Editors of THE LANCET.

SIRS,—All must agree with Mr. Nevins as to the importance of avoiding suppuration in these cases, but my experience leads me to lay little blame on the urine if this does occur; if the wound is properly closed, no urine can reach it. The directions I give to the nurse are not to use the catheter if by any means the patient is able to do without it. No syringing is necessary in small cases, but bathing of the external parts with hot water is sufficient. I always avoid even looking at the wound until the seventh day, when the stitches are removed, unless there is pain or some unusual symptom. The patient can usually pass urine by turning on to her face.—I am, Sirs, yours faithfully,

Harley-street, Dec., 1891. WALTER S. A. GRIFFITH, M.D.

INCREASED DIRECT REPRESENTATION.

To the Editors of THE LANCET.

SIRS,—I also, with Dr. Wilks, do not desire to prolong the discussion further. The result of the election has conclusively proved what I thought, that the majority of the profession desire to be represented in the General Medical Council by general practitioners; and neither is the profession as apathetic

or as powerless as some in its upper ranks believed. But, in reply to Dr. Wilks, the registration fee is now certainly, as Dr. Wilks says, paid by the parents (many of whom are medical men); still it was not always so. A great many medical men who are now in middle age paid it themselves. When I qualified it was not necessary to register at once, and I did not register until more than a year after I had been house surgeon at the West London Hospital; and neither was my colleague, the junior house surgeon, registered, nor did he register for some years after he passed, when he commenced private practice; and this was the frequent custom, if not the rule, of many of my contemporaries, not to register till they commenced practice, and in many cases I know they paid the fee themselves from their own earnings.

I am, Sirs, your obedient servant,

FREDERICK H. ALDERSON, M.D.

Hammersmith, Dec. 12th, 1891.

P.S. I enclose a type of many letters I have received, and the opinion expressed is almost universal.

To the Editors of THE LANCET.

SIRS,—In your issue of Saturday last, Dr. Samuel Wilks, referring to the General Medical Council, says that it was framed by Act of Parliament "as a Council of Medical Education and Registration for the purpose of supplying the public with fully educated medical men." This, certainly, is one of the duties of the Council, but I maintain that its duties extend over a much wider area. As I have pointed out in a previous letter, the Act provides for the prosecution of unqualified and unregistered persons, and, further, gives authority to the treasurer of the Council to claim all penalties recovered under the Act (Med. Act, 1858, Sect, 42), thus implying that the Council is the proper authority to enforce its provisions. The chief grievance we, as general practitioners, have against the Medical Council is that after we have paid our fees for registration—which, by the way, are not always paid by our parents or guardians, as Dr. Wilks asserts—we are compelled, through the inaction of the Council, to enforce the penal clauses of the Medical Act at our own expense. There may not be, as Dr. Wilks says, "one word in the Act about professional interests"; but there are clauses relating to the admission of persons to the profession and to the conduct of both registered and unregistered medical practitioners, which, if strictly enforced by the Council, would very materially affect "professional interests."—I remain, yours faithfully,

GEORGE BROWN,

President of the General Practitioners' Alliance.

Threadneedle-street, E.C., Dec. 14th 1891.

A PLOT TO MURDER SANITARY REFORMERS.

(FROM A CORRESPONDENT.)

IT will be remembered that a few months ago Dr. Treille, Chief of the Sanitary Service for the French Colonies, had a book sent him which he nowise expected, and which was marked private. It seemed strange that a book should be marked private; and, as Dr. Treille had received letters warning him his life was menaced, he felt suspicious. He cut the paper, loosened the string fastened round the book, and was about to look at it, when he found the binding somewhat stiff and difficult to open. His suspicions now being thoroughly aroused, he raised the binding slowly, gently, and but slightly, and peeped inside. This enabled him to perceive brass knobs, and he also saw that the book was hollowed out and filled with some substance. Taking the volume at once to the police station, Dr. Treille rushed off to warn his superior, M. Etienne, the Sub secretary of State for the Colonies, who, he found, had received a similar volume. It was also discovered that a third volume of the same character had been sent to M. Constans, the Minister of the Interior. The perspicacity displayed by Dr. Treille, his rapidity in warning those whom he conceived might, and for the same cause, be exposed to the same danger, saved the lives of two Cabinet Ministers and his own existence. For a long time the police have in vain sought to discover the author of this attempted crime. After much hesitation and many investigations, the police authorities have within the last few days come to the definite conclusion that the attempt is due to professional jealousy. The name of a high functionary has been even mentioned in connexion with this affair by some French papers, and the naval authorities have been called upon to continue their search for the criminal. It seems incredible that such a heinous crime should be the outcome of such petty motives, and yet there is no other plausible explanation forthcoming. The volumes were scooped out in the centre and a small tin box inserted containing 200 grammes of fulminate of mercury. By opening the book in the ordinary manner, friction would have been produced, resulting, on the principle of an ordinary cracker, in an explosion of detonating powder, which would have determined the ignition of the fulminate of mercury. The terrific force of the explosion that must have resulted can best be judged by the fact that the Orsini bomb was charged with only 40 grammes of the same substance. Not only would Dr. Treille's life have been sacrificed, but a portion of the house he inhabits would probably have fallen into the street, and many persons utterly unconcerned in the affair might have been killed and wounded. Also, if the contents of the books had not been discovered in good time, they might have blown up even without being opened, for it must be noted that Orsini kept his fulminate of mercury carefully packed in a wet towel, whereas the explosive found in the books was almost dry, for it only contained 1½ per cent. of water. This chemical, when perfectly dry, is so dangerous that it requires very little to determine an explosion.

It seemed extraordinary that so distinguished, popular, and amiable a person as Dr. Treille should be the victim of a desperate and dastardly attempt upon his life, and therefore I conceived it would be of interest to the members of the profession throughout the world to know something of the likely cause of such a crime. In the naval service Dr. Trielle has travelled in most parts of the world, he is well acquainted with the English language and the English colonies, has many English friends, and is one of the most progressive administrators in the naval medical service. At the International Congress of Hygiene, held at Vienna in 1887, his paper on the Life of Europeans in Tropical Climates was considered so useful that it was reprinted in separate pamphlet form at the expense of the Congress. Nothing has ever transpired to suggest that there is any private personal motive for revenge against Dr. Treille, and if it were so, such motives would not apply equally to M. Constans and M. Etienne, who received at exactly the same time, from evidently the same source, explosive volumes of identically the same character. A mystery, in which the life of an eminent member of the profession was involved, together with the lives of two Cabinet Ministers, merited a special inquiry, and consequently I have collected what information I could on the subject.

The reforms recently effected in the French colonies are the only cause that can as yet be discovered to account with any degree of plausibility for these attempted murders. Dr. Treille had no personal acquaintance with M. Constans; but the Minister of the Interior, the Sub-secretary for the Colonies, and Dr. Treille were the three persons most concerned in bringing about the recent alterations, by which not only the commercial prosperity but the public health of the French colonies will be much improved. This is how the matter stands. Putting aside Algeria, most of the French colonies and protectorates were under the Ministry of Marine. But the naval authorities behaved more like conquerors than as colonisers. Gambetta first had the idea of uniting the administration of the colonies to the Ministry of Commerce, and this was the commencement of the independence of the French colonies. The Gambetta Ministry, however, lasted so short a time that the reform was not carried out, and the colonies reverted to the Ministry of Marine. It was not till March 14th, 1889, that the colonies were definitely made over to the Ministry of Commerce, and M. Etienne was appointed the first Sub-secretary of State for the Colonies with a seat in the Cabinet. M. Etienne was nominated through M. Constans's influence, and it is felt that so long as M. Constans remains in office M. Etienne will be maintained at his post, and the present system of reform for the colonies will not only continue, but be further developed. The supposition therefore arises that it was for this reason both M. Constans and M Etienne received volumes charged with explosives.

The governors of the colonies are now selected by M. Etienne, and for the most part are civilians, whereas formerly the colonies were governed exclusively by military or naval men. The results of the change are favourable in this sense, that there is more commerce and less fighting. Very good reports are received, notably from Senegal, Cayenne, and New Caledonia. In Dahomey, since the realisation of this alteration, the revenue from custom dues has increased from £4800 to £10,000.

There still remained the health service for the colonies, which continued to be supplied by the Ministry of Marine. In a great number of colonies there is not a sufficiently important civil population for a medical man to obtain a remunerative practice. Medical aid for the colonial hospital and civil population has to be paid for and provided by the State. Naval doctors never knew whether they would have to remain at sea or be told off for land service in some distant colony. They had no voice in the choice of a colony, were there for only a limited time, and consequently took but little interest in the place and in their work. On Jan. 7th, 1890, a decree was signed conjointly by the Minister of Marine and the Minister of Commerce, rendering the health corps an autonomous body under the sole authority of the Sub-secretary for the Colonies. Naval doctors were invited to volunteer for colonial service, where they were offered the same rank as on board ship and double the pay. The organisation of all this service was placed in the hands of Dr. Treille, and in a short time about 200 medical men were withdrawn from the control of the Ministry of Marine. Dr. Treille had to indicate what should be done in different colonies; and these 200 colonial medical men, feeling that they have now a career before them in the colony in which they select to reside, display much more energy, interest, and intelligence in their work. Thus some notable improvements have been already effected. There are stations for vaccination from the calf established at Martinique and New Caledonia. At St. Pierre Miquelon, in Newfoundland, a special service has been organised against diphtheria, with an isolation hospital and a stove for disinfecting by steam under pressure. Finally, a Pasteur hospital and bacteriological school has been opened at Saïgon, under the direction of Dr. Calmette. Here several English patients were treated, and the institution may render great service to the British as well as to the French Indian colonies. It is easier to reach Saïgon than Paris; and a person bitten by a mad dog has no time to lose.

Taking these facts into consideration, it will be seen that a great and to all appearance a beneficent change has been effected. But jealousies have been excited, influences transferred from one authority to another, hatreds engendered, leading up, it is supposed, to the terrible plot which nearly cost the lives of the Minister of the Interior, the Sub-secretary for the Colonies, and the Chief of the Colonial Sanitary Service.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Influenza.

I MUST, of course, say something about influenza in commencing this letter, and, to be brief, it is now diffused all over the north-east of England. In Newcastle and Gateshead the outbreak is very serious, and it has told heavily on the old and weakly. Over eighty interments have taken place in one of our cemeteries in little over a week, a most unusual number. Several of our local medical men are laid up from it, and not a few from influenza and overwork combined. Dr. Renton has reported a serious outbreak in the Consett district, and at Leadgate, county of Durham, it is very bad. I have heard of over one hundred cases being noted in a small colliery village near this city. Several schools are closed, scholars and teachers being laid up. The death of Mr. R. M. Fraser, surgeon, of Darlington, from this cause was announced last week. Mr. Fraser had been in active practice in Darlington for nearly thirty years. He was medical officer for the central and northern district of the Darlington Union.

White-lead Factories.

It is stated in our local papers that among other important matters connected with the administration of the new Factory Law, to come into operation on Jan. 1st next, the Home Secretary has now under consideration the drafting of some special rules under Clause 8, which, if adopted, will enable him to deal effectively with the manufacture of white lead by what is known as the "Dutch" process, and which has been shown to be so dangerous to health and life—so much so, that it is hoped that this form of female labour will be absolutely prohibited by law. So far, none of the numerous inventions and processes lately introduced have been successful in superseding this old mode.

Medical Vacancies in Newcastle.

There are several medical and surgical vacancies to fill up in Newcastle at the Fleming Memorial Children's Hospital. The post of surgeon will probably fall to Mr. Walter Ridley, that of ophthalmic surgeon to Dr. Percival, while that of pathologist will probably be offered to Dr. George Murray.

Carlisle and the Lake District.

The ball for the benefit of the Cumberland Infirmary, Carlisle, has been indefinitely postponed "as a mark of respect to the family of the late Bishop and his many friends." The ball had been fixed for Jan. 6th next.—The Cumberland County Council's Technical Instruction Committee have made arrangements for the holding of a class for schoolmistresses in hygiene and domestic economy as a preparation for the examination to be held in the Science and Art Department in May next. Mr. London (lecturer in Hygiene to the County Council) is to take this subject, and will give not less than twenty lectures in Carlisle.—A good deal of interest is being taken on a forthcoming work on the Natural History of the Lake District, by the Rev. H. A. Macpherson, to be published by Mr. David Douglas of Edinburgh. It is a book that naturalists, sportsmen, and country practitioners will like to possess, as it will describe the former haunts of the red deer and the white wild cattle of Inglewood in the days when the Goshawk bred at Bassenthwaite and the monks of Lanercost claimed their tenth of skins of foxes hunted in the Cumberland forests.

Milk in relation to Disease.

Dr. H. E. Armstrong, the medical officer of health for this city, delivered an interesting and instructive lecture last Saturday to the Newcastle Farmers' Club on Milk in relation to Disease. Dr. Armstrong's remarks took a wide scope as to the causation of disease from milk, and its protection from all causes likely to contaminate this valuable food. He was very strong as to tuberculosis being conveyed from the cow to the human subject through and by milk. He advocating the keeping of milk in glass bottles instead of tins, and proper dairy inspection.

Newcastle-on-Tyne, Dec. 16th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Death of Dr. Gillespie.

DR. JAMES DONALDSON GILLESPIE, who died last week in Edinburgh, was one of the oldest practitioners in the city. He was a graduate of 1845 and a Fellow of the Royal College of Surgeons of Edinburgh. He was at one time a surgeon to the Royal Infirmary, but at the completion of his term of office in that capacity he devoted himself to family practice. He was much respected by his brethren, and was known and beloved by many for his social and other excellences. He succumbed to pneumonia following upon influenza.

The President of the Royal College of Physicians, Edinburgh.

Professor A. R. Simpson, Professor of Obstetrics and Gynæcology in the University, has been elected President of the Royal College of Physicians in succession to Professor Grainger Stewart.

Health of Edinburgh in November.

The total number of deaths registered during November was 567, making the death-rate 29·97 per 1000. In the corresponding month of last year the number of deaths was 326, and in 1889 it was 406. The average death-rate in the month of November for five years preceding 1891 was 16·77 per 1000. As regards age, the great number of persons above sixty years is very striking. The figures are: 161

under five years, 62 between five and thirty, 156 between thirty and sixty, and 188 above sixty years. Deaths from diseases of the chest amounted to 295, or 52·38 per cent.; 70 were due to debility and old age, and 19 were due to zymotic diseases.

Infectious Disease in Edinburgh in November.

During the month of November there were 147 cases of infectious disease intimated, compared with 274 in the corresponding month of last year, and 956 in the same month in 1889. During the month 102 patients were admitted to the City Hospital, and 87 were discharged, and 7 died. At the end of the month there were 142 patients in the hospital, of whom 79 were adults and 63 children.

The Universities Commission.

In quarters where medical education is taken an interest in, and where the methods of the newer schools are known, there is an active sentiment of extreme dissatisfaction at the feeble-handed manner in which the Commission is treating the whole subject of University reform. Any reform at the initiative of the University itself appears to be hopeless, and unless public sentiment can be brought strongly to bear on the Commission, and they are thus induced to act more strongly, they might as well never have been appointed.

Queen Victoria Jubilee Institute for Nurses, Edinburgh.

In the third report of this institute it is stated that the Queen had appointed the Princess Louise to be President of the Council in succession to the Countess of Rosebery. There had been a great demand for nurses, and the staff had been increased. The Council have arranged for lectures on hygiene, nursing, cookery, &c. Twenty-eight probationers had entered the home during the year. During the year twelve local associations had been formed in connexion with the institute, and had engaged Queen's nurses. A large number of patients had been attended, and many visits had been paid. In fact, altogether the report is an excellent record of most useful and humane work.

The Christmas Vacation.

The medical classes in Edinburgh rise for the Christmas vacation on Friday, the 18th, and resume on Tuesday, Jan. 7th, 1892.

The Influenza Epidemic.

The impression amongst many of the medical practitioners in Edinburgh is that the epidemic is abating, owing probably as much to the exhaustion of suitable soil as to any attenuation of its virulence.

Assistant Medical Officer for Glasgow.

The Health Committee have unanimously decided to recommend that the appointment of assistant medical officer for Glasgow should be given to Dr. A. K. Chalmers, Mossend. Dr. Chalmers is a son of Glasgow, a graduate of our University, and a holder of the Cambridge University Diploma in Public Health. He served for some time in Belvidere and Knightswood Hospitals before settling down in Mossend. The salary attached to the post is £300 per annum.

Dec. 15th.

IRELAND.

(FROM OUR OWN CORRESPONDENT.)

Royal Academy of Medicine Transactions.

AMONG the papers in the Medicine Section of the ninth volume of the Transactions of the Academy may be specially mentioned one by Mr. Kendal Franks on Professor Koch's Treatment of Tuberculosis, and one by Mr. P. J. Hayes on Colectomy. Mr. Hayes used in his case the Lembert suture, which he found quite effective, and it also possesses the important merit of being applied with rapidity—an element of the highest value in abdominal operations. Mr. H. Gray Croly's paper on Ligature of the Lingual Artery or Arteries preliminary to removal of a portion or the entire Tongue for Cancer is a contribution to practical surgery which will amply repay perusal. Turning to the Section of Pathology, attention may be drawn to Typhoid Organisms, by Dr. McWeeney; Congenital Deformity, by Dr. E. H. Bennett, who also contributes a paper on Cerebral Tumour, illustrating the difficulties of cerebral localisation; Cystic Kidney, by Mr. Kendal Franks, &c.

Health of Dublin during November.

The deaths from typhoid fever exceeded in November those registered in the corresponding month of 1889, when this disease was epidemic in Dublin. It is difficult, Sir Charles Cameron remarks in his monthly report, to account satisfactorily for the present epidemic of the disease, or why it is that typhoid fever is always prevalent in the latter months of the year. The bad sanitary arrangements, which by some are held to be the cause, are just as bad at other periods of the year. He is inclined to believe that typhoid fever, though spread by polluted water, milk, &c., and by defective drainage, is a miasmatic disease. In the autumn its germs are apparently developed in great numbers in soil, sewage, &c., and the risk of getting them into the system becomes proportionally increased.

Dundrum Criminal Lunatic Asylums.

Dr. Revington, assistant medical officer of an English lunatic asylum, has been appointed medical superintendent of the Dundrum Institution for the Criminal Insane, as successor to Dr. Ashe. Considerable dissatisfaction has been occasioned by his Excellency the Lord-Lieutenant going outside the ranks of medical officers of Irish asylums, more especially as Dundrum is considered one of the best of the Irish appointments, and the Council of the Irish Medical Association have passed a resolution to that effect. The emoluments of the late Dr. Ashe amounted to £650 per annum, his unfurnished apartments, fuel, light, bread, milk, ale, vegetables, butter, and washing being valued at £200.

Dinner and Presentation to Mr. H. Chapman, F.R.C.P.I.

Mr. Chapman was entertained to dinner last week by members of the Irish Medical Association, in recognition of his services as honorary secretary for the past seventeen years. The presentation plate consisted of a silver tray, silver tea and coffee set, with cake basket, and a bowl in the Queen Anne style.

Cork Branch of the Irish Poor law Medical Officers' Association.

A meeting of the Cork branch of this Association was held last week, when the reasons for establishing the Association were declared, and its claims on the Poor-law medical officers of the south of Ireland to join it were acknowledged by all speakers. The meeting was an enthusiastic one, and resolutions were adopted to the effect that Poor-law medical officers should receive proper remuneration for medical attendance on the poor; that they should be entitled to a pension after ten years' service; and that, as their duties caused a severe strain on their health, they should receive a month's annual holiday, with payment of substitute.

The salaries of the medical officers of the Rathdown Union have been increased £30 each yearly.

On the recommendation of his Grace the Duke of Abercorn, the Lord Chancellor has appointed Mr. Jno. Coote Ovens, F.R.C.S.I., of Ramelton, to the Commission of the Peace for the County Donegal.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Atropine in the Treatment of Paralysis Agitans.

HYPODERMIC INJECTIONS of atropine have been attended with encouraging results in the hands of M. Moretti in the treatment of that intractable and pathologically inscrutable malady, Parkinson's disease. The dose used was ½ to 1 milligramme, or about $\frac{1}{120}$th to $\frac{1}{60}$th of a grain. These injections, repeated once every twenty-four hours, brought about a notable diminution in the tremors and a certain re-establishment of the motor powers. Thus, after the fifth injection, some patients were able to carry a glass full of fluid to the mouth, to move the hand steadily behind the neck, to bend the body forwards, &c., all of which movements had for a long time previously been impossible. It was found, however, that in nearly every case the tremor returned when the injections were suspended. When continued, however, the amelioration was maintained, and the remedy is well borne for an apparently indefinite time. One patient re-

ceived as many as a thousand injections, each of half a milligramme, daily.

Influence of Asphyxia on Parturition.

The commencement of uterine contractions in parturition has been attributed by some writers to the accumulation of carbonic acid in the blood. Experiments, however, recently conducted by MM. Chambrelent and Saint-Hilaire go to show that such is not the case. These observers subjected to asphyxia—in other words, accumulation of carbonic acid to the maximum—dogs arrived at the full term of gestation. In no case did they find that this produced or accelerated uterine contractions, and they conclude, therefore, that the accumulation of carbon dioxide in the blood has no influence in the bringing about of labour.

Experimental Tuberculosis.

M. Richet records that eight months ago he inoculated two monkeys with the tubercular bacilli of the fowl. Six months later the animals still presented no trace of being affected. He now inoculated them with human tubercle, at the same time inoculating a third animal, which had not been previously touched, with tubercle from the same source. This latter animal became rapidly thin and died at the end of some weeks, with well-marked general tubercular lesions; while the two former are, as yet, perfectly healthy, showing only local lesions at the point of inoculation, which are in a good way towards cicatrisation.

Function of the Supra-renal Capsules.

At a recent meeting of the Biological Society, MM. Abelous and Langlois record that the bilateral destruction of the supra-renal capsules was observed to cause speedy death in the frog, preceded by paralytic phenomena. The blood of the animal injected into another of the same species, and in which the capsules had also been previously removed, determined toxic phenomena. It is suggested, in consequence, that the supra-renal bodies may have for function the neutralising or the removal of a poison resulting from the physiological activity of the tissues and nutritive exchanges.

The Health of the French Army.

The mortality in the army of the Republic attained in 1889 the lowest point yet reached—viz., 6·19 per 1000. This is remarked upon as a great improvement when it is remembered that before 1870 it was 10 per 1000 and more. Since then it has fallen steadily and gradually. Apart from other considerations, in these times when nations are trying to outstrip each other in the hugeness of their armies, this is of no mean importance when it is noted that every unit gained means about 500 military lives annually preserved. Commanders freely concede that military medicine and hygiene have every reason for self-congratulation in this result. Moreover, this mortality of 6·19 per 1000 includes the armies of Algeria and Tunis and the colonies, where of course the risks to life and health are much greater than in France. Omitting these, the death-rate of the troops in France proper amounts to only 5·39 per 1000 men. As to the causes of death, typhoid fever, as was to be expected, stands first, one-third of the total mortality being due to the scourge. Next comes tuberculosis, which is accountable for one-sixth. After this comes pneumonia, and, curiously enough, on a par with it, is suicide, the figures being one-twentieth for both. Suicides, however, have greatly diminished since 1870, and are not now more frequent than in the civil population of a corresponding age, and are said to be less by more than one-half than those in the German and Austrian armies. The Minister of War has lately issued orders that each officer and man is for the future to carry a first dressing on his person, not his knapsack, which is liable to be left behind in military emergencies. In time of peace these dressings are to be stored at the headquarters of each Army Corps, and regularly inspected by the medical officers with a view of being kept in an efficient condition, and are to be served out to the several units of the corps only when a general mobilisation is ordered.

The Alvarenga Prize.

At the annual meeting of the French Academy of Medicine on the 15th inst., the Alvarenga Prize of £32 was divided between Dr. Bateman of Norwich and Dr. Le Guen of Paris, for their essays on a medical subject of their own selection. Dr. Bateman's paper was on "Aphasia, and the Localisation of the Faculty of Articulate Language."

Paris, Dec. 15th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Professor Billroth on the Weapons of Modern Warfare.

ON the 2nd inst. Professor Billroth delivered a speech in the Austrian Delegation on the probable effects of the new weapons in the next war. I translate the most important passages as follows:—"The experience of army surgeons teaches that wounds caused by shells and cannon-balls are very slight compared with those caused by rifle projectiles, that very few wounds are inflicted by artillery, still fewer by cavalry, for cuts and stabs are very rare. About 80 per cent. are due to rifle-fire. The attention of army surgeons must therefore be directed mainly to rifle projectiles. As to the effect of the new projectiles, it is true we have no experience. Some think it will not be so bad; they will shoot in future at so great a distance that the bullets will either not hit at all or seldom, or go too far, and soldiers will confine themselves to manœuvring the enemy out of position, and go in less for slaughter *en masse*. Manœuvring out of position, however, is a thing which has its limits. The tug of war must come at last. Owing to the greater range and propulsive power of the new rifle its effect will be important, and the bullet, which used to be stopped when it struck a bone, will go through it, and perhaps through two or three more. The range of the new projectile is said to be a kilometre and a half (about fifteen-sixteenths of an English mile). The number of the severely wounded will therefore be much greater. The rapidity of the firing will be still further increased by the circumstance that the smokeless powder will allow the enemy to be better seen. Owing to the greater range of the projectiles, too, the rear hospitals will have to be further back, and the difficulty of transport will be proportionately increased." Professor Billroth then spoke of the effects of the smokeless powder, and pointed out that the storming of fortified points will be possible only with tremendous sacrifices. "I remember," he said, "at the storming of the Gaisberg, at the battle of Weissenberg, a poor Parisian boy, a sub-lieutenant of eighteen, who had fourteen shots in his body, and did not fall till the last of them wounded his thigh. Till then he held his sword and the colours in his hands. An effect of the smokeless powder in such cases will certainly be that the silencing of the guns will be easier, for as they will not raise so much smoke, the gunners will be much longer and more easily visible, and consequently in much greater danger. Finally, there is a kind of fighting the most horrible of all—man-hunting. That occurs when the outposts, who stand opposite each other, before they can do anything, watch one another, and if a cap or a helmet peers out over a bush or behind a wall, look out for the soldier, as if he were a beast, to shoot him down at last. This kind of fighting, too, will be influenced by the smokeless powder, for the soldiers, not being veiled in smoke, will be more easily visible to their adversaries, so that the shooting and counter-shooting will be more rapid. The consequence will certainly be that the arrangements for the transport of the wounded will have to be increased. Take Gravelotte and St. Privat, for instance. Those were two of the largest fronts that ever stood facing one another. The battle began at noon and ended at 8 P.M. In these eight hours there were 5000 dead and 15,000 wounded." Professor Billroth calculates that the Germans would have needed 500 stretchers and 1000 bearers on that occasion; and, as in the battle victory was with them, and they had to care for the French wounded as well as for their own, they would have needed 1000 stretchers and 2000 bearers. "If," he continued, "such progress be made in aeronautics that people will fight or throw shells down from the air, or lift electric batteries in balloons and flash down lightning—that is not exaggerated fancy—it will be necessary to make a change in this respect also, and the thought that the help for the wounded must be proportionate to the increase and the great development of the projectiles has now become general among the people." He then discussed the necessity of lighting battle-fields by large reflectors, and advocated the re-establishment of the Academy for Army Surgeons. The Minister of War thanked him, and promised that his suggestions should be carefully tested. It is interesting, in this connexion, to call to mind that, so long ago as 1859, Professor Billroth, then assistant in the Surgical

Clinic in the Ziegelstrasse in Berlin, published a book entitled "Historical Studies on the Diagnosis and Treatment of Shot-wounds from the Fifteenth Century down to the Present Time."

The Influenza Epidemic.

The average number of deaths from influenza in the week before last was nine daily. To this number must be added 130 deaths from pneumonia, pulmonary catarrh, &c., caused by influenza. The average age of the victims of this epidemic is sixty. It has been observed that the course of the disease has been specially severe in patients suffering from heart disease, and that in scrofulous children it has left disease of the brain behind it. The epidemic was the theme of discussion at the meeting of the Society for Internal Medicine on the 7th inst. Special attention was devoted to the question whether the disease is miasmatic or infectious, and the observations reported, while not excluding either theory, seemed to point mainly to local causes. The observations that the present epidemic is distinguished by complications of special severity, and is peculiarly dangerous to persons suffering from organic diseases—of the lungs, the heart, the kidneys, the pleuræ, for instance—and to people over fifty, were confirmed. It seems that those who have once suffered are seldom attacked again, and then only slightly. Dr. Guttmann of the Moabit Hospital stated that in four wards full of phthisical patients not one case of influenza had occurred, which was not the case in the last epidemic.

Berlin, Dec. 15th.

ROYAL COLLEGE OF PHYSICIANS.

A COMITIA of the College of Physicians was held on the 17th inst., the President, Sir Andrew Clark, Bart., in the chair. At the commencement of the proceedings the President alluded in feeling and graceful terms to the loss sustained by the College in the death of Sir Risdon Bennett, a former President, and on the motion of Sir Richard Quain, seconded by Dr. G. Harley, it was unanimously resolved to request the Registrar to send a letter of condolence to Lady Bennett on her bereavement, and also to request the College officers to attend the funeral.

Communications from the Foreign Office respecting the Bill now before the French Assembly regulating medical practice by foreigners in that country were read.

A request of the Milroy Lecturer to deliver his lectures in the theatre of the Embankment Hall was granted.

Communications were read from the General Medical Council, and a report was received from the representative of the College upon that body.

The report of the Committee of Management recommending the addition of regulations to those at present in force for the diploma in Public Health, in conformity with the suggestion of the General Medical Council, was received and adopted.

A report of the Council, comprising a scheme for the five years' curriculum, which had been drawn up by a special committee of the Council, after conference with teachers and communications with various medical schools, was then discussed. Dr. Sturges, chairman of the committee, briefly explained the chief changes that were recommended, and it was further explained that the instruction in Practical Medicine comprised the use of the laryngoscope and other instruments. It was also pointed out that there was no actual curtailment proposed in the time to be devoted to instruction in Physiology, owing to the recommendation to introduce Elementary Biology into the first year of study. A letter from the Physiological Society protesting against any such curtailment was read and supported by Dr. Pye-Smith. Dr. Curnow stated that there was really no change in the present requirements which do not embrace more than one course of lectures in Physiology, although, as a fact, the examinations necessarily demand elementary instruction in the subject. The scheme was adopted by the College, and the committee which had drawn it up, together with Drs. Ord and Norman Moore, were appointed as delegates to confer with delegates of the Royal College of Surgeons upon the question.

The recommendation of the Council to recognise Mr. T. Cooke's School of Anatomy as a place of instruction for candidates who had been rejected at the elementary examination in Anatomy and Physiology was adopted.

The appointment of Dr. Goodhart as examiner for the Murchison Scholarship was confirmed.

On the motion of the Registrar certain alterations in the by-laws, mainly verbal, were enacted for the first time.

The President nominated Dr. Bridges as Harveian Orator for 1892.

Medical News.

THE Duke of Westminster has accepted the office of president of the National Hospital for the Paralysed and Epileptic (Albany Memorial), Queen-square, Bloomsbury.

PRESENTATION.—Mr. T. M. Draper, L.R.C.P., Lond., M.R.C.S., on resigning the senior resident medical officership of the Toxteth Workhouse, has been presented by the officers and nurses of the workhouse with an address and an electro-plated salver and tea service.

BEQUESTS.—Mrs. Ellen Keogh left £50 to Jervis-street Hospital, Dublin.—Mr. J. H. Macnamara bequeathed £100 to each of the following—viz., St. Vincent's Hospital, Mater Misericordiæ Hospital, Kingstown Hospital, Coombe Lying-in Hospital, and Jervis-street Hospital, Dublin.

ROYAL METEOROLOGICAL SOCIETY.—At the monthly meeting of this Society on the 16th inst., Mr. W. Marriott, the assistant secretary, gave the results of the investigations undertaken by the Society into the thunderstorms of 1888 and 1889, which he illustrated by lantern-slides. Dr. Theodore Williams has been nominated president for the ensuing year.

VOLUNTEER MEDICAL STAFF CORPS, (1st LONDON DIVISION).—The annual competition for the challenge shield of this corps took place at Westminster Hall on Dec. 8th. Three companies competed—viz., No. 1. (Surgeon Capt. Valentine Matthews), No. 4. (of which First Class Staff Sergeant Waterson was in charge owing to the unavoidable absence of Surgeon-Major J. A. Watson), and No. 5 (Surgeon Capt. J. Edward Squire). The newly appointed adjutant of the corps, Surgeon-Capt. Julian P. S. Hayes, acted as judge. Each company was put through a rather exhaustive programme, including company drill, stretcher drill, the lifting and carrying of patients, waggon drill, bandaging, application of splints, &c. Ultimately the shield was awarded to No. 1 Company (Surgeon-Capt. Valentine Matthews), the members of which are recruited from the medical schools of Charing Cross, King's College, University College, and Middlesex Hospitals. This is the second time that this company has been successful in this competition, the shield having been won by it previously in 1889.

ÆSCULAPIUS LODGE, No. 2410.—The second meeting of this Lodge was held at the Café Royal, Regent-street, on Wednesday last, the 9th inst. The following members were present: Bros. J. Brindley James, P.M., WM.; Lennox Browne, P.M., S.P.M. (acting); F. Ernest Pocock, P.M., S.W.; Belgrave Ninnis, P.M., J.W.; G. Danford Thomas, Treasurer; Thomas Dutton, P.M. (Secretary); Jacob Pickett, S.D.; G. Crawford Thomson, J.D.; Frank Oldfield, P.M.D. of C.; Anthony Nutt, S.G.; Henry Frye, Stewards; also H. W. Kiallmarck, P.M.; N. E. Yorke-Davies, E. H. Eyard. J. R. Leeson, John R. White, Lewis Lewis, and George H. Blackmore. Among the visitors were Bros. George Brown, W.M., and Surgeon-Major Black. Francis Wickstead, P.M., M.R.C.S., and B. Adolphus Alexander, L.D.S., R.C.S., were elected joining members. Montague Cheale, L.R.C.P., M.R.C.S., D.P.H.; Frank Reid, L.R.C.P., M.R.C.S.; Edward Stoke Bell, L.R.C.P., M.R.C.S., and Clifford Luxmore Drew, M.B., C.M., M.R.C.S., barrister-at-law, were all initiated into Freemasonry. After the business was transacted the brethren sat down to a capital banquet. The usual toasts were given and received with acclamation, especially when the W.M., in proposing the health of the M.W.G.M. H.R.H. the Prince of Wales, alluded to the happy engagement of his M.W. Bro. H.R.H. Prince Albert Victor. W. Bro. George Brown replied for the visitors, and complimented the founders upon getting together so many eminent medical Masons, for he felt sure that the Lodge would make a double bond of brotherhood. The interval between the toasts was enlivened by the vocal talents of Bros. Moss Campbell, Leeson, James, and Blackmore.

IT would appear from a telegram received from St. Louis that the disease which has recently been prevalent in the French Soudan has been diagnosed as yellow fever, and not malarial fever, as was at first supposed. Quarantine has been put in force against arrivals from infected districts.

DERBYSHIRE ROYAL INFIRMARY. — A special meeting of the governors of this institution has been called for Dec. 21st, to consider the report of the building committee and the estimates for the erection of the new building. There are already three candidates for the vacancy on the medical staff caused by the resignation of Dr. Ogle. They are Dr. Garside and Dr. Vaudrey of Derby, and Dr. Milnes of Turnditch.

AMERICAN SURGICAL ASSOCIATION. — At the twelfth annual session of this Association, held at Washington in connexion with the Congress of American Physicians and Surgeons, the Council recommended the Honorary Fellowship of the College to be conferred on Mr. Thomas Bryant, President of the Royal College of Surgeons of England; Mr. Reginald Harrison, Mr. Arthur Durham, of London; and Professor John Chiene of Edinburgh.

CAVENDISH COLLEGE, CAMBRIDGE.—The council has decided to close the College at the end of this year, the students now in residence having been transferred to other colleges in the university. Arrangements are being made for graduates of the College who wish to proceed to higher degrees or to continue on the University register, and the College registers will be placed in the custody of the Non-Collegiate Students' Board. It is desired that the buildings should be utilised for some educational institution, and they will be for sale or for hire for such a purpose as soon as they cease to be used as a public hostel of the University.

METROPOLITAN ASYLUMS BOARD.

Return of Patients remaining in the several Fever Hospitals of the Board at Midnight on December 15th, 1891.

Hospital.	Beds occupied.						Total accommodation.
	Scarlet fever.	Diphtheria.	Typhus fever.	Enteric fever.	Other diseases	Total.	
Eastern Hospital	240	64	..	53	1	358	442
North-Western Hospital	301	47	..	17	1	366	411
Western ,,	102	20	..	23	1	146	224
South-Western ,,	196	37	..	36	3	272	340
South-Eastern ,,	208	21	3	10b	2	339	454
Northern ,,	437	20	..	33	...	489	480
Totals	1484	209	3	266	8	1970	2351

SMALL-POX.—*Atlas* hospital ship, 1.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ALEXANDER, S., M.D., B.Ch. Irel., has been appointed Medical Officer, *pro tem.*, Belfast.

BATES, S. H., M.B.Lond., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the North-Eastern Hospital for Children, Hackney-road.

BLAKE, S. E., L.R.C.P., L.R.C.S. Edin., L.F.P. & S. Glasg., has been appointed Junior House Surgeon to the West Ham Hospital, Stratford, E.

BUTLER, S., L.F.P.S., L.M. Glasg., has been appointed Medical Officer of Health to the Rural Sanitary Authority, Stafford.

CADMAN, E. S. R., M.B., C.M. Edin., has been appointed Medical Officer for the Smalley Sanitary District of the Belper Union, vice Garnham, deceased.

CHALLINOR, C., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Rural Sanitary Districts of the Leigh Union, vice Hall.

COATES, H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Salisbury Urban Sanitary District of the Alderbury Union.

CUMINE, J. M., L.K.Q.C.P., L.R.C.S.Irel., has been appointed, *pro tem.*, Medical Officer of Health for the Tunstall Urban Sanitary District.

DEEPING, G. D., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Rural Sanitary District of the Rochford Union.

DUDFIELD, R. S. C., M.B., D.P.H.Camb., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health for Eastbourne.

HITCHINS, T. J., L.R.C.P., M.R.C.S., Senior Assistant Surgeon, has been appointed Surgeon to St. John's Hospital for Diseases of the Skin, Leicester-square.

HOLT, H. M., L.S.A., has been appointed Medical Officer of Health for Malton, Yorkshire.

JOHNSTON, JOHN SOMERVILLE, L.K.Q.C.P., L.R.C.S. Irel., has been appointed by the Postmaster-General Medical Officer to the Bletchley Station Post-office and District.

LAW, T. BROUGH, M.B., C.M. Glasg., has been appointed Resident Medical Assistant to the Royal Infirmary, Dundee.

MCCAULL, J., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer, *pro tem.*, Belfast.

NODES, JOHN DICKINSON, M.R.C.S., L.R.C.P.Lond., has been appointed Senior House-Surgeon to the West Ham Hospital, Stratford, E.

O'KEEFFE, J. MCN., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Widnes Urban Sanitary District of the Prescot Union.

PHILLIPS, E. V., M.R.C.S., D.P.H. Dub., has been appointed Medical Officer for the Tollerton Sanitary District of the Great Ouseburn Union.

RHODES, J., M.R.C.S., L.S.A., has been appointed Medical Officer of Health for the Glossop Urban and Rural Sanitary Districts.

ROBERTSON, C., M.B., C.M., L.M. Edin., has been appointed Medical Officer for the First and Second Sanitary Districts of the Parish of Birmingham, vice Johnston, resigned.

RUSSELL, WM., M.B., C.M. Aberd., has been appointed Junior Resident Medical Officer to the Toxteth Workhouse Infirmary, Smithdown-road, Liverpool.

SHARPE, W. CECIL, M.B., C.M. Edin., has been appointed Assistant Surgeon to the Whitworth Hospital, Darley Dale, Derbyshire.

SOUTHEY, A. J., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Eton Rural and Urban Sanitary District.

TAYLOR, F. R. P., M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., has been appointed Assistant Medical Officer to the Earlswood Asylum.

THOMSON, G. RITCHIE, M.B., C.M. Edin., has been appointed Extra Honorary Surgeon to the Royal Hospital for Sick Children, Glasgow.

WILSON, J. O., M.D., M.C.Aberd., has been appointed Parochial Medical Officer for Glass, Aberdeenshire, vice G. Wilson, resigned.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BELGRAVE HOSPITAL FOR CHILDREN, 79, Gloucester-street, S.W.—Ophthalmic and an Aural Surgeon.

BOROUGH HOSPITAL, Birkenhead.—Junior House Surgeon. Salary £60 per annum, with board and lodging.

COUNTY ASYLUM, Prestwich, Manchester.—Assistant Medical Officer. Salary commences at £100 per annum, with prospect of an increase, together with furnished apartments, board, washing, and attendance.

COUNTY OF LONDON.—Assistant Medical Officer of Health for the County of London. Salary £500 a year, rising by annual increments of £50 until it reaches £600 a year. (Apply to the Clerk of the Council, Spring-gardens, S.W.

DERBYSHIRE ROYAL INFIRMARY.—Physician.

DORSET COUNTY HOSPITAL, Dorchester.—House Surgeon to reside and board in the hospital. Salary £70.

GENERAL HOSPITAL, Birmingham.—Assistant House Surgeon for six months. Residence, board and lodging provided.

GENERAL HOSPITAL, Birmingham.—Honorary Surgeon.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INFIRMARY.—Surgeon.

HALIFAX INFIRMARY AND DISPENSARY.—Assistant House Surgeon. Salary £50 per annum, with residence, board, and washing.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House Physician.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House Surgeon. Salary £70 per annum, with residence and maintenance in the house.

LIVERPOOL STANLEY HOSPITAL.—Honorary Assistant Ophthalmic Surgeon.

OLDHAM INFIRMARY.—Medical Officer for the Eye Department, to attend to In- and Out-patients. Honorarium £30 per annum.

OLDHAM INFIRMARY.—Junior House Surgeon. Salary £50 per annum, with board, lodging, and washing.

ROYAL HOSPITAL FOR SICK CHILDREN, Glasgow.—Assistant House Surgeon. Salary £30 per annum, with board and washing.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—Assistant House Surgeon. Board, residence, and washing provided.

THE COPPICE, Nottingham.—Assistant Medical Officer. Salary £120 per annum, with furnished apartments, board, washing, and attendance.

THE GUARDIANS OF KENSINGTON.—Resident Medical Officer for temporary Supplement Infirmary at Plaistow, Essex. Salary £160 per annum, with furnished apartments, board, washing, &c. (Apply to the Clerk to the Guardians' Offices, Marloes-road, Kensington.)

UNIVERSITY COLLEGE, Dundee.—Demonstrator of Anatomy. Salary at the rate of £120 a year.

UNIVERSITY OF EDINBURGH.—Additional Examiners. Salary in each case is £75 a year, with an allowance of £10 a year for travelling and other expenses in the case of examiners not resident in Edinburgh or the immediate neighbourhood.

VICTORIA HOSPITAL FOR SICK CHILDREN, Queen's-road, Chelsea, S.W.—House Surgeon. Honorarium £50 per annum, with board and lodging in the hospital.

VICTORIA HOSPITAL FOR SICK CHILDREN, Queen's-road, Chelsea, S.W.—House Physician. Honorarium £50 per annum, with board and lodging in the hospital.

WESTERN GENERAL DISPENSARY, Marylebone-road, N.W.—Honorary Surgeon.

WESTMINSTER AND GENERAL LIFE ASSURANCE ASSOCIATION, King-street, Covent-garden, W.C.—Two Medical Officers. Salary of each 100 guineas.

YORK COUNTY HOSPITAL.—Junior House Surgeon. Salary £40 per annum, with board and residence.

Births, Marriages, and Deaths.

BIRTHS.

BARNES.—On Nov. 13th, at Mahaica, East Coast, Demerara, British Guiana, the wife of W. S. Barnes, M.D., of a daughter.

GODDING.—On Dec. 9th, at Elphinstone-road, Southsea, the wife of Chas. C. Godding, Fleet Surgeon R.N. (H.M.S. *Vernon*), of a son.

LEWIS.—On Dec. 12th, at Hamilton-terrace, N.W., the wife of Edward J. Lewis, M.B., F.R.C.S., of a daughter.

MANSELL-MAC CULLOCH.—On Dec. 8th, at Les Touillets, Guernsey, the wife of W. Mansell-Mac Culloch, M.D., of a daughter.

MOORE.—On Dec. 9th, the wife of F. Hone Moore, L.R.C.P., L.R.C.S.I., L.M., of a son.

WALTERS.—On Dec. 16th, at 5, Fairfield-road, Croydon, the wife of F. R. Walters, M.D., M.R.C.P., F.R.C.S., of 20, Finsbury-circus, of a daughter.

MARRIAGES.

ANSON—GREENSTREET.—On Oct. 19th, at Christchurch, New Zealand, George Edward Anson, M.D., son of the late Canon Anson, St. George's Chapel, Windsor, to Margaret Emily, daughter of the late C. H. Greenstreet, Esq., of Ashburton.

CAREW—CUNLIFFE.—On Dec. 15th, at St. Martin's-in-the-Fields, Sydney Carew, L.R.C.P. Lond., M.R.C.S., of Whitehall-avenue, London, S.W., to Helena, youngest daughter of John Cunliffe, Esq., of Norwood, late of Accrington.

DEWSNAP—MICHELL.—On Wednesday, Dec. 9th, at All Saints, Marazion, Cornwall, by the Rev. F. Lemon, M.A., the Vicar, assisted by the Rev. W. H. Hughes, M.A., Vicar of St. Hilary, William Frederick Dewsnap, eldest son of William Dewanap, of Hammersmith, to Emily Mary, youngest daughter of Ambrose Oxley Michell, of Chymorvah, Marazion.

RUTHERFORD—SCOTT.—On Dec. 10th, at St. James's, Benwell, Newcastle-on-Tyne, John V. W. Rutherford, M.B., M.C., M.R.C.S. eldest son of the late Dr. Rutherford, to Annie Mary, elder daughter of Walter Scott, Esq., Bentinck House, Newcastle.

STOCKER—FULLER.—On Dec. 15th, at Wolverhampton, by the Rev. S. P. Carey, M.A., assisted by the Rev. B. A. Millard, B.A., Edward Gaved Stocker, M.R.C.S., L.R.C.P., eldest son of T. Stocker, Glenview, St. Austell, Cornwall, to Ethel, third daughter of Councillor Fuller, Wolverhampton.

WATTS—BENNETT.—On Dec. 17th, at the Parish Church of St. Nicholas Cole Abbey, Queen Victoria-street, City, by the Rector, the Rev. H. C. Shuttleworth, M.A., Harry Watts, L.S.A.Lond., youngest son of the late Thomas Nathaniel Watts, of Bix Hill, Henley-on-Thames, to Hetty, fourth daughter of the late James Bennett, of Stowe Castle, Bucks.

DEATHS.

BENNETT.—On Dec. 14th, at 22, Cavendish-square, W., Sir J. Risdon Bennett, M.D., LL.D., F.R.C.P., F.R.S., aged 82.

COLEMAN.—On Dec. 6th, at 15, Upper Camden-place, Bath, Matthew Coleman, M.R.C.S., L.R.C.P., M.D.

FRASER.—On Dec. 7th, at Darlington, Robert McLean Fraser, L.R.C.P. Edin., L.F.P.S.Glasg., aged 57.

GILLESPIE.—On Dec. 7th, at his residence, Walker-street, Edinburgh, James D. Gillespie, M.D.Edin., F.& L.R.C.S.Edin., aged 68.

MINTER.—On Dec. 15th, at Mount Priory, Plympton, John Mocklenburg Minter, M.D., Inspector-General, Royal Navy, aged 76, Honorary Physician to the Queen, and Surgeon Extraordinary to H.R.H. the Prince of Wales.

PIRRIE.—On Dec. 13th, at 14, Redcliffe-street, Redcliffe-square, South Kensington, James Miller Gordon Pirrie, M.D., youngest son of the late Professor Pirrie, of the University of Aberdeen, aged 39.

SANFORD.—On Dec. 12th at his residence at Jordangate, Macclesfield, Charles John Sanford, M.R.C.S., late Surgeon-Major of the 4th Battalion Cheshire Regiment, aged 77.

STEDMAN.—On Dec. 5th, at Guildford, James R. Stedman, M.D.St.And., F.R.C.S., aged 74.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

BAILLIERE, TINDALL, & COX, King William-street, Strand.
Memory; its Logical Relations and Cultivation. By F. W. Edridge-Green, M.D., F.G.S. Second Edition. 1891. pp. 288.

BAILLIÈRE ET FILS, Paris.
L'Athétose Double et les Chorées Chroniques de l'Enfance. Par J. Audry. Avec deux Photographies et une Planche hors texte. 1892. pp. 411.

CHURCHILL, J. & A., New Burlington-street, London.
On the Simulation of Hysteria by Organic Disease of the Nervous System. By T. Buzzard, M.D. Lond. 1891. pp. 113.
The Pathological Histology of Bronchial Affections, Pneumonia, and Fibroid Pneumonia. By A. G. Auld, M.D. Illustrated. 1891. pp. 207.
A Practical Treatise on the Diseases of Women. By T. G. Thomas, M.D., LL.D. Sixth Edition, revised. By P. F. Munde, M.D. Illustrated. 1891. pp. 826.
Notes on Gynæcological Nursing. By John B. Hellier, M.D. Lond., M.R.C.S. 1891. pp. 80.

CASSELL & COMPANY, Limited, London.
Surgical Diseases of the Ovaries and Fallopian Tubes, including Tubal Pregnancy. By J. Bland Sutton, F.R.C.S. Illustrated. 1891. pp. 500. Price 12s. 6d.

DAVIS, F. A., Philadelphia and London.
Age of the Domestic Animals. By R. S. Huidekoper, M.D. Illustrated. 1891. pp. 217.

DOIN, OCTAVE, Paris.
Petit Formulaire des Antiseptiques. Par L.-A. Adrian. 1892. pp. 216.

HOLDEN, ADAM, Liverpool; and SIMPKIN, MARSHALL, & Co., London.
Guide to Trefriw and the Vale of Conway Spa. By J. W. Hayward, M.D., M.R.C.S. Third Edition. 1891. pp. 83.

KIMPTON, HENRY, High Holborn, London.
Indigestion clearly Explained, Treated, and Dieted. By Thomas Dutton, M.D. Durh. 1892. pp. 143.

LEWIS, H. K., Gower-st., London, W.C.
On Harelip and Cleft Palate. By Wm. Rose, M.B., B.S. Lond., F.R.C.S. 1891. pp. 172.

LONGMANS, GREEN, & Co., London.
The Harveian Oration on Harvey in Ancient and Modern Medicine. By H. H. Dickinson, M.D., F.R.C.P. 1891. pp. 34. Price 2s. 6d.
The Pathology and Prevention of Influenza. By J. Althaus, M.D., M.R.C.P. Lond. 1892. pp. 64. Price 2s.

NEILL & COMPANY, Edinburgh.
Strophanthus Hispidus: its Natural History, Chemistry, and Pharmacology. By T. R. Fraser, M.D., F.R.S., F.R.S.E., F.R.C.P.E. With Plates. 1891. pp. 190.

OFFICES OF THE BRITISH AND COLONIAL DRUGGIST, Bishopsgate Without, London.
Practical Dispensing. By C. J. S. Thompson. Second Edition. 1891. pp. 95.

PENTLAND, YOUNG J., Edinburgh and London.
A Practical Guide to Meat Inspection. By Thomas Walley, M.R.C.V.S. Second Edition. Illustrated. 1891. pp. 207.

PERCIVAL & Co., London.
Reprint of Two Medical Tracts. By J. P. Marat, M.D. Edited by Jas. B. Bailey. Printed for private circulation only. 1891. pp. 45.

REEVES & TURNER, Chancery-lane, London.
A Treatise on the Mortmain and Charitable Uses Act, 1891. By L. S. Bristowe, Barrister-at-Law. 1891. pp. 120.

THE UNIVERSITY PRESS, Cambridge.
A History of Epidemics in Britain, from A.D. 664 to the Extinction of the Plague. By Chas. Creighton, M.A., M.D. 1891. pp. 706.

WARNE, FRED., & Co., Bedford-street, Strand, London, and New York.
Electricity up to date for Light, Power, and Traction. By John B. Verity. 1891. pp. 178. Price 1s. 6d.

WILLIAMS & NORGATE, Henrietta-street, Covent-garden, London.
Analysis of Theology, Natural and Revealed. By E. G. Figg, M.D. 1891. pp. 556.

WILLIAM WOOD & COMPANY, New York.
A Practical Treatise on the Diseases of the Ear. By D. B. St. John Roosa, M.D., LL.D. Seventh Edition. 1891. pp. 741.

Landlordism; by Henry Lazarus (The General Publishing Company, Strand, London, 1892); price 1s.—The Garden Annual for 1892 ("The Garden" and "Gardening" Office, London); price 1s.—Therapeutische und diagnostische Resultate der Tuberculinbehandlung bei 41 Lungenkranken; von Dr. Carl Spengler (Hughs-Richter, Davos, 1892).—The 'Varsity Suit: a Tale of the Tailors; reprint (The Kelly Law Book Company, Limited, Carey-street, London); price 6d.—Census 1891; Glasgow.—Old Glasgow and its Statistical Divisions, as at 5th April, 1891; Greater Glasgow, as constituted by the City of Glasgow Act, 1891; with Map; by Jas. B. Russell, M.D., LL.D., Medical Officer of Health.—Die Erkrankungen der Nase, der an Nebenhohlen und des Nasenrachenraumes; von Dr. Carl Fr. Th. Rosenthal, Berlin (August Hirschwald, Berlin, 1892).—A Handbook of Roller Bandaging; by Fanny E. Fullagar; third edition (Griffith, Farran, & Co., London, 1891); price 6d.—Fourteenth Annual Report of the Health Commissioner, City of St. Louis, Mo., 1890-91; by G. F. Dudley, M.D., Health Commissioner.—The General Pathology of "Surra" in Animals; by R. W. Burke, F.R.C.V.S.; July, 1891 (The Empress Press, Umballa).—The Ancient and Modern Physician—St. Luke and Jenner; by W. W. Parker, M.D., Richmond, Va., President of the Medical Society of Virginia (reprint), 1891.—Studies from the Anatomical Department of Owens College, Manchester; edited by Professor A. H. Young; Vol. I. (J. E. Cornish, Manchester, 1891); price 10s.—Atlas der Gerichtlichen Medicin; von Dr. Adolf Lesser; Zweite Abtheilung (Schlesische Buchdruckerei, Kunst- und Verlags-Anstalt, Breslau), 1891.—Recueil de Mémoires sur l'Idiotie; par Bourneville; Tome I. (E. Lecroenier et Babé, Paris), 1891.—The Druggist's Reference Book, 1892 (P. Blakiston, Son, & Co., Philadelphia).—The Bacteriological World and Modern Medicine; edited by P. Paquin, M.D., and J. H. Kellogg, M.D.; Vol. I., November, 1891, No. 1 (Modern Medicine Publishing Company, Michigan, and Paternoster-row, London).—The Johns Hopkins Hospital Reports, Vol. II., Nos. 7, 8, 9 (The Johns Hopkins Press, Baltimore, 1891).—A Code of Rules for the Prevention of Infectious and Contagious Diseases in Schools; third edition (J. & A. Churchill, London, 1891); price 1s.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Dec. 17th, 1891.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Dec. 11	29·61	W.	43	40	64	48	40	·41	Cloudy
,, 12	30·15	W.	36	34	..	53	34	..	Hazy
,, 13	29·57	W.	53	49	69	53	36	·10	Cloudy
,, 14	29·73	W.	49	45	69	51	45	·29	Cloudy
,, 15	30·00	S.E.	45	43	..	53	43	·01	Overcast
,, 16	29·93	W.	45	43	61	51	43	·08	Bright
,, 17	30·44	N.E.	38	36	53	45	36	..	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE COLLEGE OF PHYSICIANS AND THE USE OF THE TITLE OF "PHYSICIAN" BY ITS LICENTIATES.

M.D. puts the following question to us:—"Will you kindly inform me in your next impression if I am right in saying that the College of Physicians have a by-law to the effect that anyone taking their L.R.C.P. degree is *not* entitled to call himself a physician? And, if so, what effect the late trial 'The Queen *v.* the Justices of Ashton' would have on such an one so describing himself?" Our correspondent is wrong in thinking that the College of Physicians has a by-law "to the effect that anyone taking their L.R.C.P. degree is *not* entitled to call himself a physician." We would ask if a licentiate of a College of Surgeons is a surgeon? And granting he is so, and his right to use the title, it seems to follow inevitably that the licentiate of a College of Physicians is a physician, and is entitled to call himself such. It is within our knowledge that there is no such by-law as our correspondent supposes, and that the College has taken counsel's opinion on the subject, and was advised that "it cannot create a separate class of practitioners from physicians." It follows that the class of practitioners it creates by its licence are physicians.

Micro-organisms might apply to Messrs. Horne, Thornthwaite, and Wood, 416, Strand, W.C.

Mr. H. Chadwick.—Possibly from Christy's, Lime-street, City.

PRIZES FOR SCIENTIFIC SUBJECTS.

To the Editors of THE LANCET.

SIRS,—Can any of your subscribers kindly inform me of the prizes in professional and scientific subjects open for competition in this country and abroad? If not, may I ask where such information is obtainable?

I am, Sirs, yours truly,

Dec. 16th, 1891. S. P.

DR. HENRY STEVENS TESTIMONIAL FUND.

The sums realised by subscriptions to the above fund amounted to £98 17s. 6d. At a special meeting of the subcommittee convened on Oct. 28th last it was decided to present Dr. Stevens with a cheque for £100. This was accordingly done. The subcommittee hope shortly to forward to every subscriber to the testimonial a detailed account of the steps that have been taken in the matter. The subcommittee beg to acknowledge the following subscriptions:—Dr. W. Beach Johnstone, £1 1s.; Dr. W. H. Kempster, £2 2s. The fund is now closed.

AN ORIGINAL VIEW OF THE OFFENCE OF "COVERING."

A MEDICAL CORRESPONDENT to a provincial paper, sympathising with a practitioner who has, as he says, been singled out for punishment from among the army of similar offenders, hesitates to allow that covering is right. He makes progress, however, as he goes on, and becomes almost apologetic. He excuses and pities the better kind of unqualified assistants who are stationed in branch surgeries, and he actually argues that, from the unqualified assistants' defenceless condition, they often become more than ordinarily sympathetic and painstaking. Then, with another greater stride, he reaches the conclusion that it is to the interests of the working man that he should have medical advice at a reasonable price, without charity and without imposition. Has the writer followed the disclosures in connexion with some of these cases of covering? Does he really think that a working man is interested in seeing an unqualified assistant when he asks to see the principal, or that the cheap medicine and advice of a dispensary officered by an unqualified assistant are an advantage to the said working man? It would be as just to say that the working man is interested in being supplied with adulterated milk. We do not doubt the writer wishes to serve the cause of the gentleman whose case he discusses, and which it may be admitted was not so bad as most of the cases; but he is doing him a very doubtful service in putting forward such arguments as the above, which are as uncomplimentary to the intelligence of the working man as they are to that of the Council.

A Student.—The publication of our correspondent's letter would not be a pleasant way of calling the attention of an author to an oversight. The relative value of the different substances named have been investigated by many observers during the last two years.

AN ÆSTHETICS.

To the Editors of THE LANCET.

SIRS,—May I ask for replies to the following questions in an early issue of THE LANCET?

1. Which anæsthetic would you advise for general use?—2. What exceptions would you make to this rule?—3. What are the principal precautions to be taken in administering the anæsthetics?—4. What apparatus would you advise for administering ether, chloroform, and the A.C.E. mixture respectively?—5. Which anæsthetic would you advise for use in midwifery cases, and the most convenient apparatus for administration?—6. What is the average death-rate of English workhouses?

I am, Sirs, yours obediently,

December, 1891. SUBSCRIBER.

*** Our correspondent's queries cover too much ground for anything like full answers. 1. The safest anæsthetic for general use in temperate climes is ether; but for general practice, where an expert cannot be called in, the A.C.E. mixture is perhaps the most manageable. 2. When acute or severe chest, renal, or arterial disease is present, also in prolonged operations about the mouth, A.C.E. mixture or chloroform is preferable. Children also take these anæsthetics more kindly than ether.—3. The precautions are: That the patient shall have fasted for from four to six hours before the administration of the anæsthetic; all tight clothing or heavy bedclothes &c. must be removed and artificial teeth taken out; and the supine posture imposed. Attention must in every case be paid to *respiration, colour of the patient's face,* and the pulse. Restoratives should be at hand.—4. Clover's smaller portable regulating ether inhaler, or the gas and ether inhaler designed by the same inventor, is the best for ether; Junker's inhaler, as recently improved, for chloroform; and Krohne's respiration registering cone for the A.C.E. mixture, or the same as for ether. Sir Joseph Lister has described a simple and admirable method for giving chloroform (Holmes' System, article "Chloroform," No. iii., 1882).—6. The A.C.E. mixture or chloroform answers best for midwifery, given from a cone or sprinkled into a folded towel.—6. We do not know of any statistics bearing upon this point.—ED. L.

"A COUNTY COURT CASE."

Paterfamilias.—We do not profess to open our columns to the letters of laymen. Our correspondent will not think us discourteous in acting up to our rule. The fact that the practitioner in question in twenty-two years has only had occasion to attend the County Court three times, that on this occasion the judge and jury were in his favour, and that he openly states the case in our columns is a pretty good answer to the suggestion that he was attempting to drive a hard bargain. This answer is not necessarily weakened by the fact that two other medical men would have attended for less. Our correspondent must remember the grave nature of the case.

C. S.—The answer is doubtful. The behaviour is abominable, but what the Medical Act punishes is behaviour "infamous in a *professional* respect."

QUESTION OF TITLES.

Hospital asks whether a Member of the Royal College of Surgeons and Licentiate of the Apothecaries Hall of Ireland has a right to call himself a Physician. Also, can a Doctor of Medicine of the University of Aberdeen call himself a Physician? To the first question we must answer that the proper title of the holder of such diplomas is Surgeon and Apothecary, not Physician. Secondly, the Doctor of Medicine of a University had better be content with such a description of himself, though it would be difficult to deny him the title of Physician. His degree is a licence to practise Physic. So is the licence of an apothecary, and the present apothecary has just reason to demand a better title.

H. H.—The student of international pharmacy will find its Italian representation conveniently set forth in the "Dizionario Farmaceutico" of Signor Silvio Plevani, Director of the "Farmacie degli Ospedali Fate-bene Fratelli" of Milano. It contains the newest additions to the Pharmacopœia of Italy, with full details as to their source, preparation, and therapeutic value.

A SUGGESTION FOR CHRISTMAS.

To the Editors of THE LANCET.

SIRS,—Many of your readers probably have in their possession a variety of surgical instruments which either they do not require, or which, having become old-fashioned, are discarded. Some, being engaged entirely in medical practice, can dispense with instruments, and many would gladly do so if any very useful purpose would be served thereby. I venture to appeal to these on behalf of our missionaries abroad. Those of them who are trained medical men require good outfits, and lay missionaries—in a "professional" sense—who have received some surgical and medical training are in a position to make great use in the foreign field of what to us is often only lumber, rusting. When one hears, as I have done—and doubtless instances of a similar kind continually occur—a clerical missionary state in public that he had no other instruments than an ordinary knife and a pair of scissors with which to remove the frost-bitten foot of a North American Indian, in whose case the operation was imperative, that he operated with these, and that his patient recovered, one feels that our profession at home could readily equip such an operator with more suitable weapons, without cost, by passing on instruments which they do not use or require. Old operation-cases, knives, tourniquets, metal catheters (now so seldom used), sounds, trocars, teeth instruments, &c., could, I have not the smallest doubt, be found in abundance in this country in the possession of those who, by retirement, withdrawal from surgical practice, &c., never find any use for such things, and could easily spare them, and only want asking. Their value in the lonely positions which so many missionaries occupy, separated perhaps by two hundred or more miles from any assistance, can hardly be over-estimated, and a thoughtful realisation of this fact will, I trust, open the stores of many a busy practitioner. I have passed on those I can spare to the Missionary Training College at Harley House, Bow, E., where they have been gratefully received; but the many missionary societies, so well known and so easily addressed, will each doubtless have their own friends in the profession. I would mention further, what I believe to be true, that medical works of past editions are better than none under such circumstances, and that splints do not, as a rule, wear out, even if old-fashioned.

I trust that the length of this letter will be no bar to its insertion, and earnestly hope that the mere mention of necessity upon the one hand and the ability to deal with it on the other will meet with a very widespread response from our profession, to which your powerful journal can so largely contribute.—I am, Sirs, yours faithfully,

December, 1891. M.R.C.S.

MILITARY VETERINARIANS.

THE condition of the military veterinary surgeon appears to be a somewhat anomalous one not only in our own, but also in continental armies. The German military authorities seem to have been made aware by a partial boycotting of the Veterinary Department of the unsatisfactory status enjoyed by most of its members. Candidates have to show that they have obtained the maturity or leaving certificate from the highest class of a *Gymnasium* or of a *Realschule*—that is to say, they must have passed an examination equivalent to the intermediate B.A. or B.Sc. of the London University, and then they have to go through the course at the Veterinary College. Notwithstanding this, they only enter the army in the position of non-commissioned officers, with pay amounting to £90 a year, and it is not until they reach the higher ranks that they obtain the status of commissioned officers. Some improvement is, it seems, about to be made by the raising of a large number of the junior members of the department to a higher rank.

Mr. F. H. Moore is thanked for his communications. We do not remember the tenor of his previous letter; but, if he likes to repeat it, we will give it fair consideration.

Invalid should consult his usual medical attendant. We do not give advice.

THE CARPENTER AND DUKES FUND.

The following subscriptions have been received at THE LANCET Office on behalf of the above Fund:—Dr. H. Sutherland, £2 2s.; Dr. Walter Kidd, Blackheath, £1 1s.; Dr. John Livy, Bolton, £1 1s.; Dr. J. A. Austin, West Norwood, 10s. 6d.

Enquirens may find the information he desires in our Students' Number published in September last.

VIEWING THE BODY BY THE CORONER'S JURY.

To the Editors of THE LANCET.

SIRS,—It has been proposed in this city that the old custom of viewing the body by the jury in cases of the coroner's inquest should be abolished; and in favour of this proposal it is the intention of the new coroner, Mr. Oliver Pemberton, to present a memorial or petition to the central authorities. The arguments used are the repugnance of jurymen to view the corpse, the filthiness and insecurity of the houses which they are sometimes called to visit in their official capacity, and the danger of infection from fever cases. But in my opinion, considering the important functions exercised by the coroner's jury, involving issues of life and death in cases of suspicion of foul play, the matter deserves the greatest consideration before such an obligation as viewing the body is done away with; and though the necessity of viewing the body the cause of whose death is under investigation in every case does not exist, still I think it would be a bad plan to do away with the practice altogether, as the jury would be deprived in a difficult case of verifying the medical evidence, and forming their own conclusions by the exercise of their own powers of observation, while their verdict would have to be given without such additional light as is afforded by this process. I am, Sirs, yours obediently,

Birmingham, Dec. 15th, 1891. J. G.

*** The verification of *medical* evidence by a coroner's jury does not, we think, possess that value which our correspondent would attach to it.—ED. L.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Allchin, London; Mons. Alcan, Paris; Dr. Askin, Woodbridge; Messrs. Allen and Hanburys, London; Dr. Alderson, London; Messrs. Austin and Co., Clifton; Dr. T. Barlow, London; Dr. Benson, Dublin; Mr. T. Browne, London; Messrs. Barraud, London; Messrs. Burroughs and Wellcome, London; Mr. Bullar, Southampton; Messrs. Brady and Martin, Newcastle-on-Tyne; Mr. G. Brown; Mr. W. C. Brown, New York; Mr. Brooks, Mossley; Dr. Baldwin, Florence; Mr. Barwell, London; Mr. Brown, Edinburgh; Mr. Barling, London; Dr. Barrett, London; Mr. A. E. Barker, London; Mr. Brown, Westgate-on-Sea; Mr. Cuthbert, Salop; Miss Coleman, Hyde-park; Messrs. Cassell and Co., London; Mr. Crook, Hants; Mr. Carter, London; Mr. Cornish, London; Mr. G. A. Cross, London; Mr. A. Caddy, London; Dr. De Jersey, London; Mr. Dutton, London; Mr. Davis, London; Mr. T. S. Dymond, London; Dr. R. Dobie, Coldstream; Mr. Delaforce, Wimbledon; Mr. Ellaby, Carlisle; Dr. Felice, Venice; Mr. Ford, Leicester; Mr. Freer, Llandudno; Dr. Griffith, London; Dr. W. T. Gairdner, Glasgow; Dr. Gowers, London; Mr. Greig, Dundee; Surgeon Gifford, Queen's-gate; Mr. Gordon, Oban; Mr. Groves, Dorchester; Dr. Gordon, Portland, U.S.A.; Dr. Hadden, London; Mr. Reginald Harrison, Liverpool; Mr. H. Huntly, Hastings; Mr. Hornibrook; Messrs. W. and A. K. Johnston, Edinburgh; Mr. Jackman, London; Messrs. Keith and Co., Edinburgh; Messrs. Kilner Bros., London; Messrs. Keen, Robinson, and Co., London; Mr. Larkin, Liverpool; Messrs. Lee and Nightingale, Liverpool; Mr. Littlewood, Leeds; Messrs. Lloyd and Co., Leicester; Dr. Lush; Messrs. Longmans, Green, and Co., London; Mr. Leckie, London; Mr. Loch, London; Messrs. Lee and Martin, Birmingham; Professor Middendorp, Groningo; Mr. M. McHardy, London; Mr. F. H. Moore, Littleport; Messrs. Maythorn and Son, Biggleswade; Mr. V. Matthews; Messrs. McCorquodale and Co., London; Dr. F. L. Mackenzie, Huddersfield; Messrs. Macmillan and Co., London; Mr. Merryweather, Guisborough; Mr. H. Needes, London; Mr. Nixon, London; Dr. Nicholl, Glasgow; Dr. Nicholson, Hull; Messrs. Negretti and Zambra, London; Mr. O'Reilly, Highgate; Mr. W. W. Powell, London; Mr. Pinfold, York; Messrs. Kegan Paul and Co., London; Mr. E. A. Piggott, Clare; Dr. Prout, Cape Coast; Dr. A. Ruffer, London; Mr. Rickards, London; Dr. Sansom, London; Dr. Scholefield; Dr. K. Saady, Safed; Messrs. Stuart and Clarke, Manchester; Dr. W. R. Smith, London; Messrs. Schweppe and Co., London; Dr. G. C. Smith, Glasgow; Messrs. G. Street and Co., London; Mr. L. M. Scott, Vienna; Dr. Starling, Tunbridge Wells; Messrs. Smith and Son, Manchester; Dr. Seymour, New York; Dr. Tuckey, London; Dr. Thin, London; Mr. Thorburn, East India; Professor Tait, Birmingham; Mr. Tubby, London; Messrs. Vinton and Co., London; Mr. Wade, Yalding; Messrs. Wheatley and Co., Liverpool; Dr. Wainewright, Blackheath; Messrs. Wilcox and Co., London; Dr. Woolenman, Indiana; Mr. E. W. White, Birming-

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LETTERS, *each with enclosure*, are also acknowledged from—Mr. Askew, Woodbridge; Dr. Roberts, Ruabon; Mr. Willoughby, Sunbury-on-Thames; Mr. Gray, Edinburgh; Mr. Thorburn, India; Dr. Boreham, Torquay; Dr. Jones, London; Mr. Chadwick, Burnley; Mrs. Powell, Clapham-common; Professor Sanderson, Oxford; Mr. Hughes, Boscombe; Mr. Casey, Luton; Mr. Buller, Lulsley; Mr. Gardner, Perthshire; Mr. Norman, Criccieth; Mr. Lauder, Middlesbro'; Mr. Roberts, Ludlow; Dr. Moorhead, Notts; Mr. Evered, Bridgewater; Mr. Tyte, Minchinhampton; Miss Mainwaring, Eastbourne; Mr. Ellis, Dewsbury; Dr. Johnston, Inistrogo; Mr. Keens, Luton; Messrs. Thorp and Co., Glossop; Dr. Dowse; Mr. Berthe, Jersey; Messrs. Bryce and Rumpff, London; Mr. Ryan, Paddington; Dr. Stafford, Great Yarmouth; Dr. Windle; Mr. Watson, Glasgow; Messrs. Baelz and Co., London; Dr. Jones, Bridgend; Mr. Hart, co. Down; Mr. Foley, Barnsley; Messrs. Merryweather, London; Mr. Simpson, Hayward's Heath; Mr. Evans, Aberdare; Mr. Todd, Selby; Messrs. Cooper and Holt, London; Mr. Fuller, Wolverhampton; Messrs. Tulloch and Co., London; Mr. Walters, London; Mr. Fiske, Dawlish; Mr. Thin, Edinburgh; Mr. Watts, Wandsworth; Mr. Whitworth, Manchester; Mr. Heywood, Manchester; Mr. Grieve, Demerara; Mr. Bayley, Stourbridge; Mr. Pike, St. John's, N.F.; Mr. Paulson, Loughborough; Mr. Dreaper, Kilkenny; M. P., Lordship-lane; Secretary, Coventry and Warwickshire Hospital; Principal, London; Secretary, Windsor Royal Infirmary; D., Liverpool; L. M. J., London; S. S. W.; Lady Superintendent, Hospital for Women, Liverpool; Hackney Furnishing Co., London; Fides, London; Beta, London; Smedley's Hydropathic Establishment, Matlock; O. P. Q., London; Hon. Secretary, Oldham Infirmary; Country, London; Secretary, Royal Hospital for Diseases of the Chest, City-road; E. R., Hammersmith; Secretary, University of Glasgow; General Medical Council, London; Secretary, Borough Hospital, Bootle; Helmet, London; Statim, London; Secretary, Guest Hospital, Dudley; Medicus, Liverpool; Secretary, Royal Portsmouth Hospital; Secretary, General Hospital, Notts; Secretary, University College, Bristol; Alpha, Bridport; Felix, London; M., London; Firs Home, Bournemouth; E. J., London; M.B., Manchester; F. E. H., London; K. N. L., London; Forceps, London; N. B, London; M.D., Balham; Syntax, London; Winter, London; Caput, London; Urban, London; W. E. Q., London; A. M. F., Lytham; Surgeon, Somersetshire; America, London; 7, Chambers-street, Edinburgh; Turnover, London; Lena, Hampstead; A. B., Norwood; Medicus, York; Vicar, Biggleswade; Medicus, Wrexham.

NEWSPAPERS.—*Norfolk Standard, Times of India, Glasgow Herald, Newcastle Leader, Wolverhampton Chronicle, Leeds Mercury, Eastbourne Gazette, Bristol Mercury, Nottingham Guardian, Scotsman, Western Mercury, Birmingham Gazette, South Wales Daily News, Manchester Guardian, North British Mail, Tunbridge Wells Gazette, West Middlesex Standard, Surrey Advertiser, Windsor and Eton Gazette, Reading Mercury, Mining Journal, Morning Advertiser (New York), The Press (New York), The World (New York), Hertfordshire Mercury, Brooklyn Morning Journal, Liverpool Courier, Freeman's Journal, The Sun (New York), Bideford Weekly Gazette, Herald (London), Lancaster Gazette, Daily Standard Union (Brooklyn), New York Times, Railway Herald, &c.*, have been received.

Medical Diary for the ensuing Week.

Monday, December 21.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Tuesday Wednesday, Friday, and Saturday at the same hour.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M. Thursday, 9 A.M.

Tuesday, December 22.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic operations, 4 P.M.; Friday, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electrotherapeutics, same day, 3 P.M.

LABORATORIES, VICTORIA EMBANKMENT, W.—5 P.M. Dr. A. E. Wright's Results of Researches carried out at the Laboratories.

Wednesday, December 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1.30 P.M.; Saturdays, 2 P.M. Obstetrical Operations, Thursdays, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.

ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M. Surgical Visits on Wednesday and Saturday at 9.15 A.M.

Thursday, December 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.

Friday, December 25.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, December 26.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

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